

Aviation News

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NOVEMBER 20, 1944

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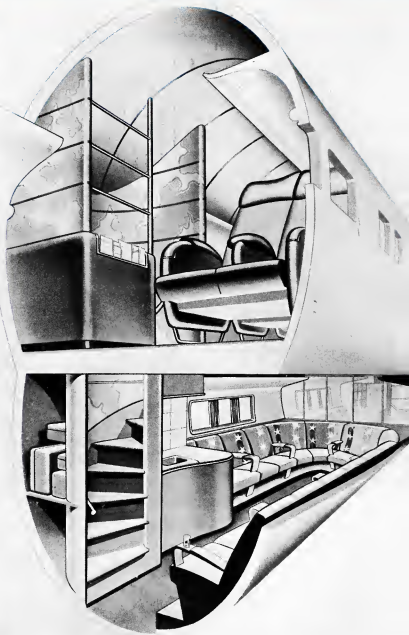
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Two-Deck Boeing Luxury Liner: The two decks of the Boeing 377 Stratocruiser—first of the superairliners of the post-war period to test flown—is shown in this artist's cutaway sketch showing the lower rear compartment lounge and the stairway to the upper deck, where the main passenger section is housed. Fourteen persons can be accommodated in the lounge, 72 in the day version of the main compartment.

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THE AVIATION NEWS

Washington Observer

NEW SURPLUS BOARD—The names of members of the new Surplus Property Board should be announced shortly. It is reported, Sam R. Huchens, who has been the director of the Reconstruction Finance Corp., in charge of surplus war property, is one of the members, the board will set a top-notch committee. He has been with RFC since pre-New Deal 1933, started as an executive and has been steadily promoted since.

CAMOUFLAGE COST—Tangled up somewhere in the red tape of Washington are applications from several aircraft companies for permission to remove the camouflage trappings from their plants. Many of them, especially on the West Coast, have elaborate set-ups constructed in the early days of the war, set-ups they would now like to get rid of. Involved, as is often the case in such things, is the matter of cost—whether the company or the government is going to pay for removal.

AAF VETERANS—There is considerable talk in Washington of the organization of an association of Army Air Forces veterans. Current conversations follow the line that the AAF veterans might well be members of other veterans' organizations, but that they would be AAF veterans first and foremost. The setting up of such a group might well have an important influence on the future of both military and civil aviation. The project is still in the talk stage, but the talk is flowing out from Washington around the world.

GOVERNMENT PLANTS—Expansion of government-financed aircraft plants rose slightly in September over the previous month, according to latest available figures, but aircraft plant expansion is expected to drop in the last quarter of the year to around \$63,000,000 according to best guesses of insiders. This compares with a first quarter dollar volume of about \$141,000,000 indicating a definite downward trend.

Identifying cards tell story of International Conference



FEDERAL WORKS—The Federal Works Agency has been strongly quiet since the WPA was "honorably discharged" by President Roosevelt early in the war. It has conceded itself chiefly with a small program called War Public Works, largely sewer and water facilities and setbacks for war housing projects. Known for keeping the organization in order now begin to appear with a request to Congress for funds to assist states, cities and counties in blueprinting public works up to \$5,000,000,000 in the first year of peace. Officials wouldn't say how much would go into air facilities, but it is safe to assume that air field facility construction would have a sizable place in any program approved.

STEAMSHIP LINES IN THE AIR—The awarded report of the House Merchant Marine and Fisheries Committee, expected to back the position of the steamship companies in their campaign for air rights and throw a few daggers at Pan American's chosen airment proposal appears at long last to be on its way into public light. The report, being written by the Committee's counsel, Irvin McCann, formerly counsel for the Nichols Committee to Investigate Air Accidents, probably will go to the House within a week.

RECONNAISSANCE FLIGHTS—The Japanese are playing a cat-and-mouse game with these B-29 reconnaissance planes, or haven't anything that will reach them at high altitude. Even the Japs admit that reconnaissance planes have been over the home islands for as long as an hour without being detected.

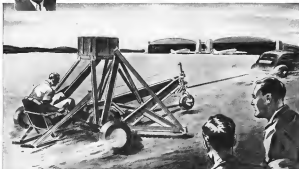
ASSEMBLY LINE CONVENTION—Insurgent reports that the Surplus Property Board will be partly in conference of new planes "surplus to service needs" by diversion from production. Intra SPB officials take the attitude that any such procedure would be a War Production Board question entirely, that the services should get the new planes and release older ones to

DESIGN FOR SAFER LANDINGS



BY FRANK A. TICHENOR

Publisher of Aero Digest explains the action of the Bell-designed shimmy damper now in use on many U. S. planes employing telescopic landing gear



Testing the Bell Aircraft shimmy damper

THE telescopic landing gear provides distinct advantages—diminution of ground bumping, and nose-over hazard, apparent ground vision, improved ground handling and maneuverability, simplified landing and take-off procedure, increased pilot safety, and ease operation from small, improvised fields.

"However, when first developed, the tendency of the nose wheel to shimmy or chatter hampered its use by setting up a vibration so great that there were cases in which the nose wheel strut was literally ripped out of the fuselage.

"A former Bell Aircraft sales executive—now a Lt. Colonel in the AAF who wears the Distinguished Flying

Cross—said two Bell engineers, un-
solicited, helped to solve this problem
with the shimmy damper—a control
which helps keep the nose wheel from
rearing more than 60° to the left or
to the right.

"Located in the harness end of the
nose wheel strut, it consists of two
hand valves and a wing shaft on which
there are two valves. This assembly is
filled with fluid.

"When the nose wheel tends to turn,
the pressure of the wing forces that
fluid through a metering orifice which
is in turn further controlled by a diaphragm valve—thence dispersing the
amount of the nose wheel's lateral
reaction. The only outlet for the fluid

is through the valve, which can be
adjusted to restrict or ease the nose
wheel action in accordance with the
pilot's requirements.

"The wing shaft can rotate only to a
radius of 180°, because of stops which
prevent further rotation.

"We planes now land and take off
in jungles and from icy steppes as
easily as if as any of our modern airports
at home, thanks to this kind of
finagling.

"The shimmy damper is one of the
many contributions which Bell Aircraft
has made to the progress of the
aerial industry."

★ *See War Results and Speed Victory* ★

NEWBORN FRONTIER DIVISION

Buffalo and Niagara Falls, N. Y.
Albany (F 30) and Oswego (F 42) — Fighters
Albany — *Army's First Jet Propelled Plane*
The Bell Helicopter

PERFORMANCE DIVISION

Berlin, Pa.
Flexible Gun Motors and other engine materials

GEORGIA DIVISION

Marietta, Ga.
B-25 Boring Superfortress

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Bell Aircraft Corporation

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NOVEMBER 20, 1944

ATC Official Cites AAF Support For Expansion of Civil Airlines

Gen. C. R. Smith, in Oklahoma Aviation Clinic address, stresses military value of strong, aggressive commercial aviation and declares Army has and will retain direct interest in strengthening resources of civil carriers.

By ROBERT H. WOOD

New evidence that the Army Air Forces is backing an aggressive, expanded commercial post-war air transport system of thousands of planes for the United States because of its military value is seen in an address prepared by Maj. Gen. C. R. Smith, deputy commanding general of the Army Air Transport Command, for the National Aviation Clinic which met last week in Oklahoma City.

The address balanced recent reports in airline circles that the AAF is the most powerful advocate for the strongest possible domestic and international commercial air network for this country, and that General Arnold had rescinded the promise of President Roosevelt that expansion will go ahead as rapidly as possible, even with restrictions when necessary.

Arnold gives credit—airline officials previously give General Arnold generous credit for the speed with which this Government has acted since the Civil Aeronautics Board came out last spring with a suggested route system before the Board were fully aware of our accelerated plans. This accelerated the date for the International Air Conference now under way in Chicago.

Smith, who left the presidency of American, the nation's largest airline, to become operating head of ATC, greeted air transport operation in history not only stressed that transport planes will be increasingly necessary in future warfare, but announced flatly that AAF has and will continue to have a direct interest in strengthening the resources of the civil carriers. His estimate of the military value of a civil transport fleet as against a military fleet, was the strongest

the extension of air transportation to an ever increasing number of people," Smith's address said.

✦ **Forecast**—He also called for a forward looking viewpoint by those in government entrusted with development of air transportation. The reference to "military strain" on the treasury was seen by airline officials at the Clinic as an oblique concession that at least some operations will not be commercially feasible, but would be deemed necessary for national defense.

There is little doubt that the airline industry already has a "forward looking viewpoint," and that it can make even further efficiency records at given enough stimuli and results to increase traffic and cut costs. The rest is up to the proper government aviation official, especially CAA, and there are increasing signs that this agency is certainly more expeditiously minded than it was a year ago. Its decision granting British and American additional services last week is the latest evidence.

✦ **Assurances**—Smith echoed persistent assurances made to the airline by General Arnold since Pearl Harbor that AAF has no intent to



MESSERSCHMITT ME 262 FIGHTER:

Shown is a sketch from the British magazine *Aeroplane* showing the ME 262, single-seat, rocket-propelled fighter, powered by two Junkers Jumo 004 gas turbine units. The craft is now reported operating against Allied troops in Belgium and Holland. A German broadcast said the plane's armament can consist of four 30 mm cannons.

Steers New Head

May Sheldon (Sheldon) Steers, Michigan aeronautics director, was elected president of the National Association of State Aviation Officials, succeeding Doctor Martin, South Carolina. Other officers: L. D. Schroeder, Minnesota, first vice president; George E. W. Stanford, Utah, second vice-president; Arthur H. Tully, Jr., Massachusetts, third vice-president; and R. W. Stanford, Alabama, re-elected secretary-treasurer.

necessary, where pilots can be trained as salesmen and furnished to dealers on request. It may be a condition of franchise that the dealer agrees to send his men to such schools. Some may want to be found at once to arrange defense programs in which damaged Army and Navy pilots and ground crew men may participate.

The sales manager must meet the hangar problem. The dealer may well hangars, at least, he must be prepared to provide hangar service or tell the customer where he can get a hangar. Private hangars afford privacy, reduce manpower, prevent delay in moving other planes and may cut insurance rates.

As adequate finance plan, probably on time payments, is another must for the sales manager. Although insurance charges were responsible for part of the high finance cost before the war, higher finance costs also crop up in the time customer sometimes paid full price of a policy but got only an "insurance certificate which costs less and offers less protection" or in insuring to receive \$100 of heliox gas or insurance charges for a customer as to take that sum from manufacturing cost. The post-war plane system will be tested by sales managers, to the thousands of military pilots who wish to maintain their licenses.

Studies may be made on investments necessary for new dealers and the size of stock. Federal standard models to spend output and cut costs, and factors should be able to add extra equipment desired by the customers.

The trade-on problem will be important. The industry should join the Aeronautical Chamber of Commerce in compiling a "Blue Book" similar to that in the auto field to establish fair prices for used

planes. It would be available to dealer, finance company or bank.

Diligent study of territory maps will save the practice of drawing modern lines on a map, and bring detailed information on each trade area, incomes, number of airports, pilots, and students. Part and possibly profitable opportunities will be prepared, and both factory and dealer will be protected by size and shape of territory. The dealer knows every manufacturer will have hundreds of dealer applications in its files. Merely because he was a dealer before the war does not guarantee his post-war franchise. Many capable, financially able merchandisers are eager to compete for the new pilots. They may be primarily auto, refrigerator or other dealers not entirely dependent on air sales and they may build their own airports and give the old-line plane salesmen new, unconventional competition.

"Thus, the dealer applicant who

Model Code

Model aviation state code sponsored by the National Association of State Aviation Officials includes that bill: one creates a state aviation governing body or commission; another provides for state regulation and development of airports; third is an airport authority law authorized by the CAA, and the fourth, not yet complete, is a "new regulatory" bill to provide for uniform adoption of pilots, aircraft, etc.

The bills were drafted by a committee headed by William C. Green, Assistant Attorney General of Minnesota, at the request of the Civil Aviation Joint Legislative Committee composed of representatives of NASAO, NATA, NAA, AERMA, ACCA's Federal Aircraft Council and the Aviation Insurance Group, Council of State Governments and Civil Aeronautics Administration. The code and existing such legislation has been followed where possible.

It follows the general principle that the Federal Government has a major responsibility for airworthiness of planes and competency of pilots and for the broad plan for airports, while the state will enact and assume responsibility for airport legislation and regulation, and for governing air movements which do not go outside state borders.

can come to the factory with the best analysis of his territory, his land and most effective airport and hangarage setup, the greatest amount of merchandising experience and adequate financing is the one who will probably walk out with the franchise," Merz said.

U. S. State Control Favored at Clinic

Cooperation rather than competition in regulation and protection would bring aviation greatest benefits, says representatives at Oklahoma City session agree.

By ALEXANDER MURKREY

Agreement was voiced last week at Oklahoma City by many of the representatives of aviation groups at the National Aviation Clinic, on the principle that joint Federal and state protection and regulation of aviation can do the industry greatest good, if the two governmental spheres of influence are clearly defined and if the state legislation follows a uniform policy.

The most agreeable atmosphere was in odd contrast to the major verbal free-for-all which developed at the first National Aviation Clinic a year ago at Oklahoma City over the Lee Bill.

Model Aviation Code—This year the National Association of State Aviation Officials, meeting two days before the clinic, brought forth a model aviation code which will conform for uniform adoption by all states. Pointing out that nearly every state now has some aviation legislation (all but six), NASAO hopes it can obtain uniformity of such legislation so that conflicting laws and regulations in the several states will not hamper and start the growth of aviation.

In many states only minor changes will be needed in existing legislation, to meet the model code requirements. The state code would not affect the airlines' autonomy in the opinion of the NASAO sponsors because "it is not economic legislation." It is reported that representatives of two air lines have indicated their feeling that uniform state legislation may be the next step in the problem, and that at least they concede that some state regulation of aviation is inevitable.

State-U. S. Regulation Discussed—Carrying over from the NASAO

meeting into the clinic sessions, the subject of state and Federal regulations was considered at the first afternoon session with Maj. Sheldon (Sheldon) Steers, Michigan aeronautics director and Dr. John H. Frederick, of the University of Texas, presenting their views.

Dr. Frederick contended that the Federal government has proposed the entire field of control and regulation of air transportation, and that "state laws and regulations are not only unnecessary but a menace." He warned of the chaotic condition which he said would result from 48 different standards of aircraft and pilot regulations.

Asks Cooperation—Major Steers called for state and Federal cooperation in regulating aviation similar to that now existing in law enforcement between state and local police and the FBI. "The state," he said, "can choose between recognizing the Federal authority of licenses of aircraft and aircraft or by making it a state violation to fly within its state without them, or leaving its own licenses. Under existing Federal regulations, licensed pilots and uniformed aircraft may operate with impunity within a state so long as they stay within its borders and do not cross a Federal airway," he declared.

Personal aircraft received a major emphasis at the clinic, while airport disposal, airports and traffic control, air passenger and cargo transportation, feeder airlines and fixed base operations, military aviation, and education in the sciences and arts of the air were other subjects covered in papers and discussions at the four-day clinic sessions.

Some 30 voting delegates, chosen to represent 14 classifications of aviation groups and allied public interests, attendance at the clinic supplemented close to a thousand.

WPB Aircraft Unit—Aircraft Industry Division of the War Production Board became a unit last week when a small staff was organized to function under the director who has not yet taken over—probably Harry Nelson, formerly with National Aircraft War Production Council, who has not yet been released from duty in the current war production administration.

Three Branches—A deputy director will serve under him and



NATS PASSENGER TRAVEL IN PACIFIC:

Traveling by Naval Air Transport Service plane in cockpit zone is speedy but not entirely luxurious. Some of the passengers in this NATS transport have to sit on the cargo, which is sometimes more comfortable than sitting in the cramped seats along the side, as many travelers in military planes these days will attest.

there will be at least three branches of the Division. The Aircraft Properties branch and the Project Review branch will continue and a Planning branch is anticipated.

The division will deal with aviation requirements in aircraft production deemed by both WPB and the military as essential to the war program and according to present thinking, will assist in reorganizing the industry as war contracts are canceled and the manpower situation eases.

Credit Insurance For Canada's Exports

The Canadian aircraft industry, which may have three major plans for the export market after the war, will have an advantage of insurance against losses in credit risks through the new Canadian Export Credit Insurance Corp. The export credit corporation is being set up under new Canadian legislation—the Export Credit Insurance Act. It is capitalized at \$4,000,000 with a credit surplus of \$5,000,000, and may sell bonds and debentures.

Export Trade—Despite the fact that Canada has in the past always imported aircraft and equipment, it is a virtually certain that Canada now will export Canadian-Vickers built Douglas DC-4 aircraft under license to Great Britain. Burnelli type transports that TACA Airways are understood to be buying

British Tell How Rockets Aid Takeoff

British Royal Navy declared how rockets assist carrier-borne aircraft to take off in light winds with heavier loads and at greater speed shortly after the U. S. Navy (Aviation News, Sept. 14) announced jet-equipped planes take off in one-third to one-half the normal run.

Simple Mechanism—The British employ a simple mechanism, easy to attach to ordinary aircraft and loaded with explosive charges of cordite. The rockets are mounted on each side of the fuselage. Each group contains from one to four rocket tubes held in a carrier—the number used varying in each case according to type of aircraft and weight of load.

As outlined by GSR, the rocket-launched aircraft starts its takeoff in the normal way. At the optimum point of the takeoff, previously marked and determined from a graph which allows for wind speed, the pilot fires all his rockets simultaneously. This gives the plane just the extra impetus needed for a quick takeoff, lasting about four seconds. Rockets and carriers are then jettisoned.

990 pswh. Wing spread is the same as the B-35—41 feet, three inches. It is 13 feet longer—110 feet, four inches. Controls are aerodynamically balanced, and do not require power boost.

P pressurized — The pressurized cabin is designed to maintain an atmospheric level of 8,000 feet up to an operating altitude of 30,000 feet.

Engines probably will be Wright Cyclones of 2,000 rated hp and 3,500 takeoff hp. The 377 can maintain flight at 30,000 feet with three engines operating.

On land, even here, a crew of seven is required—pilot, co-pilot, flight engineer, navigator-radio operator, and three stewards. A crew of five is estimated for transcontinental operations—pilot, co-pilot, flight engineer-radio operator, and two stewards.

Finagle construction of the Strato-Cruiser is such that equipment and mechanical operating devices are sturdy and quickly reached from the ground and in flight. All four power plants on the 377 are quickly interchangeable—W. G. K.

Canadian Vickers Stock Purchases

U. S. and Dominion aircraft are being reported buying into Canadian Vickers, Ltd., Montreal, are current in Ottawa and have not been officially denied.

Reports that American and Canadian aircraft interests are buying into Canadian Vickers, Ltd., Montreal, are current in Ottawa and have not been officially denied.

Vickers Aircraft Division has a contract with the Canadian government to build 80 Douglas DC-4 transports for Trans-Canada Air Lines. Douglas and other American aircraft companies as well as Canadian groups are reported in the deal. Douglas' contract with Canadian Vickers permits building DC-4's for export to Great Britain.

Political Issue—Control of Canadian Vickers was a political issue some months ago when the Canadian government announced the DC-4 post-war building program, for which the company is now tooling up. At that time Belgian in-

terests owned about one-fourth of the stock, which has since been reported purchased by Roy M. Walvin, Montreal shipbuilder.

There were some complaints in Canada some months ago that the contract should have gone to government-owned Victory Aircraft, Ltd., Montreal, which is now building Lancaster bombers. The DC-4 program at Canadian Vickers is understood to be tooling up in the government-owned plant of that company, with Ottawa paying for the tooling on a separate basis of actual cost. Canadian Vickers will build the DC-4 transports on a fee of two percent, the largest price being \$320,000 for each plane.

Northrop Stock Call

Stockholders of Northrop Aircraft voted to call in all present A and B stock and to issue in exchange one new class of stock on a share-for-share basis, with the transfer effective Dec. 1.

John K. Northrop, president and director; LaMonte T. Cobb, general manager and chairman of the board; and all present officers and directors were re-elected.

PRIVATE FLYING

ERCO Sales Conference Points Way To New Plane Marketing Approach

Meeting of staff in Washington with view to mapping out post-war merchandising program regarded as significant move in private plane industry.

By ALEXANDER McSURELY

A two-day distributors' conference held in Washington by Engineering & Research Corp., Riverdale, Md., manufacturers of the two-control Ercoupe, points the way to a new and more scientific approach to the problem of marketing personal aircraft, an approach which may increase returns to manufacturers who utilize it.

Pre-war sales of private aircraft, in the vast majority of cases were made on a take-or-leave-it basis. Unless the dealer wanted an airplane so badly that he sold himself, he was much more likely to end up listening to the automobile salesman who was far advanced in the art of merchandising, and with a new car, instead of the plane he originally had wanted.

Conference Significant—ERCO's conference, presumably the first meeting called by a personal plane manufacturer to map its post-war selling strategy with its distributors, is significant to the industry for a number of reasons.

Of the distributors present, a large number were men with considerable experience in automobile sales and service, with a grasp of outstanding aviation men, to complete the organization. Experience of the aviation sales field by experienced automobile sales personnel has been anticipated and discussed with mixed feelings by many aviation people, some fearful of the "high-powered competition," and others eager to introduce big business merchandising methods into aviation sales. ERCO's distributor list clearly indicates that this company is already lined up to use automotive-type merchandising, and the competitors will watch its sales progress with keen interest.

The distributors are: Oliver Parks, Parks Aircraft Sales and Service, Ltd., St. E. McLaughlin, Aviation Enterprises,

Ltd., Houston, Tex.; Douglas Robinson and R. G. Nelson, Tucson, Ariz.; C. C. Massey and G. D. MacKenzie, Grand Central Airport, Glendale, Calif.; E. M. Anderson, Anderson Air Activities, Milwaukee, W. J. Weddell and G. H. Stepler, Weddell Aviation Co., Detroit; Cady Laird and Gus Leary, Southeastern Air Service, Inc., Atlanta; W. E. Schmidt, Wilcox-Barre, Pa.; Merrill Christopher, Provo Flying Service, Provo, Utah; John R. Kende, Skyways Aircraft, Miami, Fla.; W. D. Tolpin, W. E. Maurice and Lester Sile, Baltimore; Ralph Sternberg, Connecticut Aviation Co., Hartford, Conn.,

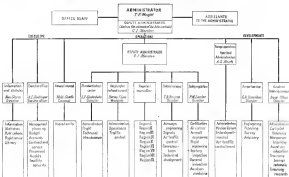
R. C. Davis, Orion Motor Co., Lake Ridge, Ark.; G. H. Kemmerer, Memphis, Tenn.; L. W. Mack, Jr., and William Bridgman, Aesc Enterprises, Inc., Denver; George Parsonsen, Cantonment; J. Wayne Stewart, Packerburg Flying Service, Packerburg, W. Va.; and Fred C. Clarke, Northwest Aviation Co., Rochester, Minn.

Problems Discussed—During the two-day conference the distributors heard discussions of engineering problems and future possibilities in design from Fred Weick, chief engineer, heard discussion of production problems by L. A. Wells, president, and an address on company policies by Henry Hartman, chairman of the board.

Oliver Parks, Ercoupe distributor for eight states, who has been conducting some newsworthy flight training group tests with the Ercoupe at St. Louis, pointed out the importance of the "selling job" necessary through demonstration to political business and labor leaders in each community, to make clear the potential utility of the private plane if suitable airports are provided in the heart of residential and shopping districts.

Mr. Parks stressed the importance of convincing Congress and

DEPARTMENT OF COMMERCE—CIVIL AERONAUTICS ADMINISTRATION



the nation's political leaders of the necessity for making adequate federal appropriations available immediately to develop airports in the nation's communities as a means of providing post-war employment and at the same time to build a permanent contribution to the welfare of each community. He also urged the necessity for selling the public in general the conviction that they must take advantage of available federal funds for airport construction.

5 Profits Hike Nacked—If these airlines are allowed out, Mr. Porter contends that aviation sales organizations have a potential market for five million personal airplanes between now and 1940.

With the exception of a few modifications, the Evepost to be offered at the end of the war will be the same plane brought out shortly before the war as a radical departure from the other lightplanes then on the market, equipped with tricycle landing gear, and two controls, eliminating the rudder pedal controls. Increased gas capacity, improvements in appointments and a major change in the landing gear will be found on the new models.

Company officials are silent on reports that a model with increased power and another model possibly a four-place family job are planned for future production.

As one official expressed it, "We are looking ahead in design like everybody else, but we feel that our standard airplane is our best design card, it is already proved itself, and we can turn it out in quantity production to meet the orders already piling up."

Geisse to Resign

John H. Geisse, CAA consultant on personnel phases, and well known designer and authority on light-plane problems, expects to resign Jan. 1, and plans to submit his resignation to Civil Aeronautics Administrator T. F. Wright when the administrator returns from the International Aviation Conference at Chicago.

Geisse has made no secret of his dissatisfaction with CAA regulations on private flying, and was particularly critical of CAA, phase I certificate requirements for a pilot's certificate in an address at Wichita, last week. He has been with the CAA eleven years, and is presently serving as an operational engineering analyst in the aircraft development division.

Morgan Outlines 5-Point Program

Also clearing away of obstacles impeding full development and enjoyment of personal flight in Oklahoma City speech.

Action on the part of the aviation industry and the American public to eliminate the obstacles which now hamper the full enjoyment of personal flight by the public was urged by John E. P. Morgan, manager of the Personal Aircraft Council, Aeronautical Chamber of Commerce, in a speech prepared for the National Aviation Clinic at Oklahoma City last week.

Morgan outlined a five-point program of objectives to be sought to make possible full realization of the personal plane's potential utility.

"Every community will need landing facilities specifically planned for personal aircraft, modified to cost, modest in maintenance, in the form of strips, within communities, flight strips adjacent to highways and air surfaces for airplanes and airplanes. The desirability of small landing field is

pointing out of the picture, to be succeeded by the well-designed landscaped strip, a community center.

"Improved aircraft performance is required, and Morgan believes that a result of normal competition between manufacturers, whether tomorrow's planes are standard airplanes with two or three engines, or helicopters or roadable planes.

"Liberalizing present Civil Air Regulations must be had, to overcome 'the greatest obstacle to full freedom of personal flight for the average citizen.' Morgan called for a sane relaxation of regulations, now grown to be an onerous burden hampering the public right to fly and imposing additional costs on flyers. He urged importance of uniformity of state aviation regulations, warning that failure to recognize the interstate traveling characteristics of the airplane would seriously handicap personal aviation.

"A simple air market system established throughout the country to enable air travelers, if lost, quickly to orient themselves is an essential requirement.

"A program to educate the public in safe flying practices, the proper uses of planes and facilities through grade school, high school, and college courses is necessary.

Morgan appealed for a more rational viewpoint on aircraft flying. "Referring to the personal plane's earthbound counterpart, the automobile, do any of us endeavor to eliminate the death-dealing stunts of the overly fast drivers?" He asked. "Do we try to drive our family car through hoods of fire, crash them through burning buildings, play leapfrog, forcing a group of obstacles, of course we don't? Why should a personal pilot emulate the stunts of a professional automobile flyer? The answer is plain—he should not."

Lauds Liaison Plan—The PAC manager paid tribute to the work done by liaison planes, dropped up in Army posts, and renowned liaison aircraft in China, Russia, Italy, Sicily, Normandy, Burma, without proper landing facilities, hangars or supplies, controlling air traffic to cities, and maintaining liaison, saving lives, rescuing lost men or units, evacuating wounded, carrying messages, and even in some cases as bombers. He also cited the work of CAP using smaller pilot planes.

"If the story has been so thoroughly told on the military utility

of these personal aircraft, certainly the public should prove no less receptive to their civilian utility," Morgan concluded.

Port Plan Studied For New York City

Government officials work with Regional Plan Association and other groups on establishment of landing facilities in airport areas.

Comprehensive plans for establishment of airports and landing facilities at the New York metropolitan area are being considered by a committee of government officials in cooperation with the Regional Plan Association, Inc., of New York. The committee is composed of representatives of twelve agencies in the New York metropolitan area, the Civil Aeronautics Administration, Port of New York Authority, Regional Plan Association, and the States of New York and New Jersey.

At an organization conference in New York City several weeks ago, the representatives discussed estimates of air travel as New York, development of light planes and other technological developments in the industry, scheduled services, private flying, government subsidy, and the length of time into the future for which planning is to be made.

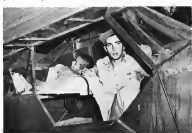
Plan Studied—As a result of that first meeting the county representatives have been given data, applications filed with CAA, the recommended standards for various types of fields, and material for local newspapers, all planned to increase widespread public interest. The committee will supply to the committee information on existing airports and other landing facilities. After this information has been gathered a second meeting will be held, according to C. Earl Morrow, acting executive director of Regional Plan Association.

Represented at the first meeting were the City of New York, Putnam, Ulster, Westchester, Nassau and Suffolk counties, New York, Bergen, Essex, Hudson, Middlesex, Passaic and Essex counties, New Jersey, and Putnam County, Connecticut, as well as New York State Department of Commerce, New Jersey State Department of Economic Development, New Jersey State Department of Aviation, New York Port Authority, Civil Aeronautics Ad-



LIGHTPLANES EVACUATE WOUNDED:

One of Piper Cub takes planes to rescue casualties from battlefield area, as shown in these photos from the CBI theater, along the Lido road in Barrow, Alaska. Above the Cub takes off from a landing strip along the road, while the strip is still under construction. Below: Sgt Alex Pansukhi, Sioux City, Ia., pilot, brings a wounded Chinese soldier to his plane to a hospital behind the lines.



Amend CAR to Ease Pilot Certification

Amendments to Civil Air Regulations facilitating issue of civil private and commercial pilot certificates to Army and Navy pilots and WASPs have been enacted by Civil Aeronautics Board.

Civil pilot certificates will be issued to military pilots or WASPs who have served on solo flying status for at least six months prior to application, if they pass written examinations on Parts 39 and 41 of Civil Air Regulations, and present documentary evidence of their service records as pilots. They must show a rating "as close equivalent" to CAA requirements for the type of certificate sought.

Reduces Delay—The amendment as to military pilots will make it possible for them to fly civil aircraft legally while still in service and also as expected to lessen con-

fusion and delay expected during the flood of applications from military pilots for civil certificates at the end of the war.

Aircraft Comprised Over 50% of Surplus

Of \$244,412,000 in surplus goods on Reconstruction Finance Corp books, approximately \$127,845,400 represents airplanes and aircraft equipment. Sales have been less than \$16,000,000, chiefly derived from CAA-WTS transfers.

No Gilder Sales—Latest available data, which bring acquisitions and sales through Oct. 13, reveal that there have been no sales of 785 surplus gliders, 38 aerial targets, or five autogiros. Of 11,478 Army planes, chiefly transport, declared surplus, only 96 had been sold. Only 217 of the CAA-WTS planes remained of 1,390 in the pool.

All that material is carried on RFC books at cost, not current value. Much of it is virtually worthless for the civilian market.

SPB Prepares Public For Scrap Disposal

Speeches of two executives seek to explain need to chalk up losses on items apparently useful but not actually so.

Aviation Division of Surplus Property Board has started its program of education to prepare the American people for "scrapping" items which seem to be useful but are not actually so," with two speeches of top executives of SPB last week.

Aviation Division and the organization of the Surplus War Property Administrator W. L. Clayton have been explaining for some time of the need for a well-balanced program by which the American people can be informed on the facts of the inevitable liquidation of surplus planes once the war is over. The initiative on the program has remained with SPB almost entirely, and the speeches of Mason Britton, assistant administrator in the Clayton organization, and Lieut. Col. William B. Harding, who heads up the Aviation Division, are significant from the Army Air Forces, might be said to be the opening of a concerted effort to bring the facts before the people.

Research for Markets—Mr. Britton said in a widely-noticed speech delivered before the American Management Association in New York, that the intensive activity of the surplus organization on non-military items for surplus scrap metal had failed to disclose a possible market for combat aircraft except to break them for gadgets.

that would "scatter every desk in the United States with aviation." He warned that a tremendous public relations job would have to be done to make the people of the country aware of the need for scrap metal salvaging of the enormous investment in planes.

Colonel Harding, in a speech before the National Aviation Clinic in Oklahoma City, told aviation people there that "experience has already proved there will not be much monetary recovery in the resale of items built for specialized uses at high cost under emergency conditions." He did tell the Clinic that "we feel this property belongs to the citizens of the United States who paid for it and we intend to make it available for those who can find a use for it in industry, in the home and on the farm." Asking for suggestions, he said the National Academy of Sciences was studying technical feasibility of all suggestions for non-aviation uses of materials.

New Bendix Units For Light Planes

Bendix Aviation Corp. "is greatly interested in the future of the personal plane and will develop special 'packaged instruments,' starters, generators, radio, brakes, shock absorbers, and other units for small aircraft at lower prices for better products," William Miers, staff executive of the company announced to the National Aviation Clinic at Oklahoma City. The official announcement verified the previous report to this effect in AVIATION NEWS.

Research—Although Miers said

Bendix has begun separate engineering research work for light plane equipment to take advantage of production and engineering lessons learned during the war, he would not comment on rumors of recent efforts of Bendix to purchase Aviatron Aircraft for an reports that the company may start its own light plane manufacturing.

Miers "will make studies and recommendations as to any other steps Bendix can take to accelerate development of the personal airplane industry," the company said recently in announcing its change from Nimrod to Bendix.

Private Plane Noise Factor Is Cited

Aviation industry is not considering the noise factor in private aircraft as seriously as it should, in the opinion of Civil Aeronautics Administrator T. P. Wright.

Addressing the National Aviation Clinic in Oklahoma City, Mr. Wright pointed out that, while aviation enthusiasts "talk very glibly" about placing airports in residential areas to develop private flying, they have given little thought to the possibility that residents won't have any part of them.

Washington Project—He pointed to the recent dropping of an airport project in Washington for this reason. Noise in aircraft is also a psychological deterrent to the potential flyer and a nuisance to the private flyer in the cockpit. Saying that the private aircraft seems to be the forgotten area of aviation, Mr. Wright termed it a challenge to designers and engineers.

Ranklin Awards

Ranklin Aeronautical Academy, Tulsa, Calif., reports its box score of awards and decorations for gallantry in aerial combat to its graduates during World War II now stands at 3,318 after a tabulation covering 74 percent of the 2,990 cadets graduated in the four years of operation.

The academy, headed by J. G. (Tex) Ranklin, former international automobile champion, lists among the awards to its graduates three Congressional Medals of Honor, four Distinguished Service Crosses, 765 Distinguished Flying Crosses, 1,922 Air Medals, and several French and Chinese decorations.

COLONEL JOHN CASEY, Manager, Chicago Municipal Airport



"A FOOLPROOF POWER SUPPLY FOR AIRCRAFT RADIO OPERATION"

Colonel Casey, Electronic Laboratories has long been aware of the need for reliable power supplies especially adapted for aircraft use. One of E. L. A. exclusive developments along this line involves wireless operating in parallel which insures a reserve power source for emergency operation. These Wireless Power Supplies—both light and heavy duty—were specially designed for complete reliability at very high altitudes.

The life of E. L. A. Wireless Power Supplies is far beyond the customary electrical requirements. With their auto-transformer type in use to a maximum—only a small fraction of the type previously required.

Other E. L. A. developments for the aircraft field include units for flashing wing lights and for automatic power illumination. This equipment has wide application for the light aircraft as well as for large aircraft. The economy and versatility of Wireless Power Supplies are also available to the motor field—here units have been designed to provide fluorescent lighting, make telephone operation and electrical appliances use—as well as many other fields where it is necessary to convert current to specific voltage and type requirements. — E. L. A. equipment comes with you on your power supply problem.

STANDARD POWER SUPPLY MODEL 56-100A

Model 56-100A is a special E. L. A. Wireless Power Supply which meets the requirements of the standard equipment. It was developed for the Canadian Radio Corp. to operate radio equipment. Input voltage: 12 volts DC, 100-110 volts AC at 50-60 Hz. Output voltage: 3000 volts at 125 mA, 400 volts at 25 mA, 200 volts at 50 mA, 250 volts at 10 mA, 300 volts at 10 mA, 1.5 volts at 10 mA. Output current: 100 mA.



Electronic Laboratories Inc.
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ELECTRONIC EQUIPMENT FOR LIGHTING, COMMUNICATIONS, AND ELECTRIC MOTOR OPERATION • ELECTRIC ELECTRONICS AND BATTERY EQUIPMENT



AERONCA SPORT MODEL

Designed to appeal to the average class of customer who likes a sport model, the Aeronca Arrow, shown in an interesting ground view, is slated to interest Army and Navy pilots when they come home. Equipped with dual controls, landing gear that retracts, and a neat hinged canopy, the prototype is made of plastic plywood, but production model will be mostly metal.



the Martin Mars means

Payload!

World's greatest annual load, these 15,000 pounds of mail were earned from Hawaii to California by the mighty Martin Mars a total of 42,500,000 pound miles for a single non-stop flight. At an average of 1½ ounce per letter, that's 900,000 letters... and all they were all paid for at prevailing rates, they would cost \$180,000 in postage.

This load not only smashed all previous records for airmail, but

more than doubled the 23,750,000 pound miles traveled with the same trip record of 15,000 pounds which the Mars earned from Belen, Brazil to Trinidad on its first year mission for the Naval Air Transport Service.

Then its payload, with economy of operation, the Mars far outstrips all rivals. And her 20 wingspans, now being built by Martin, will

offer even greater payload, lower operating costs, and higher speed. Test of all war's end will find Martin production lines fully loaded and manned by experienced workers to assure early delivery of commercial versions of the Mars. It's no wonder the Martin Mars is known as "the answer to an airman's prayer!"

THE GLENN L. MARTIN COMPANY
BANTWINE 3, MARYLAND, U.S.A.
The Glenn L. Martin Company, Chicago—Detroit

Martin
AIRCRAFT

Builders of Dependable Aircraft Since 1917

Survey Shows Vets To Continue Flying

75% of men in vet aviation plan to operate private planes in peacetime; 45% hope to own aircraft.

Keen post-war interest in aviation is indicated among personnel of U. S. military aviation units by a sampling survey of Army and Navy fliers and ground crews, by a former airline pilot now with the Air Transport Command.

During his travels the ATC interviewer, who undertook the survey as a hobby, interviewed individual Army and Navy aviation servicemen in Great Britain, Africa, South America and intermediate landing fields, including 33 percent pilots, 30 percent operators, 22 percent ground crews, and 16 percent flight crews.

Seventy percent of those polled expect to fly private planes after the war, and 40 percent hope to own their planes, while 25 percent expect to fly commercially.

► **45% to Enter Aviation Industry.**—Of those not interested in post-war flying as pilots, 45 percent wish to enter the aviation industry, and 14 percent more are somewhat interested depending on available opportunities. Occupations and preferences, indicated were: airlines, 18 percent; airport manager, 8 percent; tower operator, 8 percent; mechanic, 1 percent; executive, 5 percent; sales, 1 percent; distributor, 3 percent; administrator, 1 percent; and engineer, 1. Only 22 percent expect to take flight lessons after they leave military service, and only 26 percent indicated any interest in serving in a "World Air Force" in the event this was established as a peacetime international police agent.

► **Other Data.**—The survey showed 52 percent wanted a private plane with speed range of 100-140 mph, and 11 percent would pay between \$1,000 and \$2,500 for a post-war plane. Asked for expression of preference of plane by manufacturer, the servicemen gave the following replies: Beechcraft, 7 percent; Beechcraft, 6 percent; Cessna, 6 percent; Cessna, 6 percent; Stinson, 6 percent; Waco, 6 percent; Piper, 1, and Taylorcraft, 3.

Interviews were made while some of the men were on route home for a rest, others were awarded, others were in the transport command, and others were just a few hours away from action over enemy territory.

Briefing

For Private Flyers and Non-Scheduled Aviation

By ALEXANDER McSUKELY

CAA's Glen Gilbert, chief of air traffic control, expects a collision warning indicator about the size and weight of a compact aircraft receiver, with an indicator screen about the size of an artificial horizon, to be a requirement on all aircraft used in instrument flight conditions, as soon as they can be manufactured after the war.

► **Helicopter Rules.**—Gilbert also foresees new air traffic rules for contact flight when helicopters come into more widespread use. Visibility between one mile and one-half mile might require reduction in speed to 50 mph, and below one-half mile a reduction to 25 mph. Such regulations will require channels into busy landing areas to avoid interference between the slow craft and higher speed instrument flight planes.

► **Dallas Makes Plans.**—Plans are shaping up for a Pan American Aircraft Exposition at Dallas, next May 6-12, as an outgrowth of the Southwest Exposition last April at Mustang Airport, Dallas, with two personal plane manufacturers already having made reservations for space to demonstrate post-war concepts.

► **Scrapper Oil Companies.**—While major oil companies are making plans for developing the personal plane fuel markets, a number of the smaller companies, which are equally as producers of lubricating oils and greases, are likewise circling around for their share of distribution at the airports. Word is that they are interested in the more modest aspects, as well as the big ones, and communities and individuals interested in opening new airports might do well to inventory this possibility.

► **Three Aerospace Types.**—Two American-built planes, the Fairchild Argus and the Piper Cub, and a third American design, the Taylorcraft Auster, built in England, are expected to be among the favored surplus planes finding a place in personal aircraft markets, when available. The Avoc Avons may be adapted to light cargo and loader line roles.

► **AOPA Is English.**—Without as much as a by-your-side to the American Aircraft Owners and Pilots Association, which has been

probably the most active spokesman for American personal aviation for years, a British writer in Flight magazine recently suggested the formation of an Aircraft Owners and Pilots Association in Great Britain to champion private flying there, and even used the AOPA initials as well as the name. We wonder whether the writer already assumed he had coined a new original name, or whether he merely ignored the American organization in his article.

► **Bill She Co-Granting** student flight privileges in Mrs. Alvina Tabbe, 78, judges a crash-landed accident, offers new hope to other handicapped persons, that they can be pilots, too. Mrs. Tabbe recently solved her two-control plane at Cincinnati, also drove an automobile. Her use as one of first under new liberalized CAA regulation regarding handicapped applicants for flight training.

► **PF Information for NAA Chapter.**—New NAA service department, to local chapters general and technical information stressing private flying and landing facility development in local communities is announced by NAA Manager Lowell Swenson. The service includes chapter bulletins, a monthly airport digest and an airport consultation service.

► **PAC Revision Likely.**—Personal Aircraft Council of the Aeronautical Chamber of Commerce may revise its membership status at the next general meeting. Although the council now has eleven members, interest in personal planes has snowballed to a point where there are approximately 25 manufacturers of planes, engines and accessories, in the Aero Chamber membership who are interested. New ship may be a new group, or a new group with representative from all interested member companies, and a smaller executive committee. Recent addition to PAC membership is William L. Wilson, assistant to the president of Kallit Aviation Corp.

► **274 New Michigan Fields.**—String Aviation gasoline taxes expected to provide \$1,893,650 or more annually, Michigan's State Board of Aeronautics projects. It is calling for 274 new airports, including 205 in towns of less than 5,000. State tax will be used to match municipal and county appropriations. When program is complete, Michigan's airports will have a network of 400 airports, including those already operating, or in construction.

The 5-Week Miracle

THAT SPEEDS AID TO CHINA



CAN ENGINEERING SPEED LIKE THIS HELP YOU?

STRANGE contrast to China's teeming millions and primitive hills, the Superforts are speeding vital aid for a gallant ally. To a patient, long-suffering people, these sky giants symbolize freedom and new hope. . . and America poured forth many a miracle of ingenuity to hasten their coming. For example, when the original retraction motors used on the first B-29's proved inadequate to raise and lower the huge landing wheels, something had to be done—and in a hurry.

In three weeks, Jack & Heintz engineers designed and built a test motor for the job. Specifications called for 5,000 cycles of operation without

stop; the Jack & Heintz unit delivered 20,000. In two weeks more, production models were delivered for installation. Today, thousands of these Jack & Heintz motors are in service. This is only one of the 20 Jack & Heintz products used on the B-29.

This ability to solve a tough precision engineering and manufacturing problem quickly has been of great value in war production. It can be equally effective in attacking the complex technical problems that must be solved almost overnight if recovery is to be speedy and successful.

* * *

Jack & Heintz, Inc., Cleveland, Ohio, manufacturers of aircraft engine starters, generators, gun pilots, gun flight instruments, magnets, motors.

JACK & HEINTZ
Incorporated





From the Fight with War Bands

Storm trooper—American style

As fall of fight in every Boeing Flying Fortress is, there are some which have seen plenty of action, but have never fired a shot or dropped a bomb.

These are the B-27's chosen to perform vital but little-known roles out over the Atlantic during the days while Germany still held firm grip over France and Belgium.

Instead of bombs, they carried a staggering load of fuel-tanks of oil.

Two-thousand-mile flights were routine. They steered out over the stormy Atlantic for German bases at a time when they returned they had precious information.

For these Flying Fortresses were used to some the weather.

What winds could be expected at what altitudes? What pressure areas were swirling up what air currents? What cloud chasms loomed? The answers to these and other questions had much to do with bombing operations over Europe, and with the successful invasion of France itself. . . because they accurately forecast the weather in the European battle sky!

Boeing Flying Fortresses were chosen because of their exceptionally long range, and because the importance of the information required dependently

such as theirs. For these famous fighting ships have the same heritage of Boeing dependability as the Stratofortress and Transconqueror, which have hung up so many performance records, and the new Boeing B-29 Superfortress now entering Japanese skies.

The war record of Boeing planes speaks for the vision and skill of Boeing engineers, design, engineering and maintenance. Transconqueror three will be honored to now and remarkable appliances of peace for just one . . . and they are your assurance that any product "Built by Boeing" is bound to be good.

ORGANIZER OF THE NEW AIR SUPERFORTRESS • THE FLYING FORTRESS
THE RAPTOR STRAKER • THE STRATOFORTRESS • THE AMERICAN EXPRESS

BOEING

THE AIR WAR

COMMENTARY

Growing Pacific Air Offensive Outstanding Example of Teamwork

Flaring of activity in west-central area believed to indicate important developments are in the offing; heavy bomber strikes softening up new areas on road to Tokyo.

Recently stopped up activity in the west-central Pacific area indicates important developments in immediate prospect. Strains in the wind include persistent enemy rumors of heavy bomber strikes against various strategic points, such as Wake, Marcus and the Bonins, enemy reports of B-29 reconnaissance planes, "based in the Marianas", Jap air offensives, the first in three months, against our bases in the Marianas, and of an entirely different nature, but hardly less significant in its military bearing, the setting up of an NBC air-base-spot report from Guam, periodically included in the daily world-news round-up.

In that war this theater has its own peculiar problems. In July it may be barren on the western front, lack of ports in China, land and sea blockade. In the Central Pacific the tremendous distances and scarcity of bases have held up our progress. Predominantly a Navy theater, the Army Air Force makes up the strategic air arm of the combined operation. Navy land-based planes perform valuable reconnaissance and patrol missions, with an increasing number of strike missions as well. Carrier-based planes are the tactical air arm, having already practically knocked out the Jap Naval Air Force, and also providing powerful cooperation (more than just "support") with invading troops.

Chain of Command—In the Central Pacific the broad plans of the American Joint Chiefs of Staff are carried out by Admiral Nimitz, Commander-in-Chief, Pacific Fleet, and Pacific Ocean Area (CINCPAC). His deputy in pacific flying officer Vice Admiral John H. Towers, Nimitz' boss of Naval Air is Rear Admiral George D. Murray, Commander Air Force, Pacific Fleet (COMAIRPAC). His Army air chief is Lieut. General Milford F. ("Milt") Harmon, who for several months after Pearl Harbor was Chief of the Air Staff, Washington, and from August, 1942, to June, 1944, commanding general of Army forces, South Pacific, including Maj. Gen. Twining's 13th Air Force.

General Harmon as Commander of the Army Air Force, Pacific Ocean Area, (AAFPAC), coordinates on the highest planning staff level the activities of the Seventh Air Force in the Marianas and the Eleventh in the Aleutians. Maj. Gen. Willis Rice, former CG of the 7th, as COMAIRFORWARD has charge of all shore-based air forces, Army-Navy-Marine, in the forward area.

Seventh Air Force—Ever since its grand strikes in the capture of Iwo Jima, Saipan, Eniwetok, Oahu, Iwo Jima, the Phoenix Islands (2,300 miles), and then to Funafuti in the Ellice group, South Pacific (1,000 miles), the Seventh Air Force has been on the move toward Tokyo, and fast. A year ago they were just settling down on bases at Tarawa and Makin in the Gilberts. Four months later they had prepared the way for the Marshall Islands, and by the end of March had flown the 800-mile hop to Kwajalein, with its 2,500-foot runway, and storage and maintenance facilities, quarters, etc.

A few days later and the important staging area of Eniwetok (350 miles to the west) was ready for the Eleventh and Marshall Islands of the 7th Bomber Command. Brig. Gen. Truman H. Landon, first quarter of the 7th was still at Hickam Field, Brig. Gen. R. V. Douglas, Jr., having taken over when General Halsey moved into the forward area with Admiral Spruance's 5th Fleet. From these Marshall bases the Seventh Air Force,

together with carrier task groups, kept hammering away at Jap air and naval bases. Making the move into the Marianas, including Truk, Ponape and Kusaie.

Hard-Won Saipan—The triumphous operation which won Saipan began June 15. One week later Seventh Air Force's 7-9-47 with their eight .50-caliber machine guns and two 3-tube rocket-launchers landed on the Adizo airfield, hurriedly and expertly repaired and enlarged by a Naval construction battalion (Seabees).

Stepping-Stones to Tokyo—With the occupation of Saipan, and successful landings on Tinian, it became moving day again for the Seabees and the 200-mile hop to Saipan was made in late July. A record \$200-mile jump would land them in Tokyo, but don't look for this just yet. In taking Saipan, however, and setting up air power, these American forces have effectively broken through the barrier into Japan's inner empire. Her groups of southern islands, the Marshalls, Carolines, Marianas and Bonins were a barrier blocking our path. They have now become our stepping-stones to Japan.

Only the Bonins and nearby Kusaie (Nippon), within 600 miles of Japanese industrial action stretching from Tokyo to Nagasaki, remain in our way. Early in July, and again in early September, carrier task groups heavily attacked shipping, airfields and other installations in the Iwo Jima, Chichi Jima and Iwo Jima principal bases in these islands. Seventh Air Force Liberators have attacked them steadily several times per week since Aug. 18. Considerable numbers of Japanese ships have been reported destroyed and damaged. At present, only Iwo Jima remains a threat. If these bases are captured later on, Liberators will be able to strike Japan.

Big Bug in the Marianas—The 15 principal islands of the Marianas form a north-south chain of 500 miles. The northern group of ten are valuable, the southern are hostile. Saipan and Eniwetok are the best islands in this part of the Pacific for air bases.

American Engineers and Seabees have been working like beavers for several months. The new islands of Saipan and Eniwetok are now a base of land-based air power from the Marianas will be the first installment fulfilling General Arnold's promise that the military power of Japan will be brought to destruction.

—NANTHROP

GOODYEAR AIRCRAFT PRODUCTION REPORT

CONTRACT: 7001, NO. 4) RDT, N. 1934

NAVY "K" TYPE AIRSHIP

133 COMPLETED AIRSHIPS

DESIGN CONTRACT RECEIVED: OCTOBER 1940
FIRST PRODUCTION UNIT DELIVERED: SEPTEMBER 1941
50TH PRODUCTION UNIT DELIVERED: MARCH 1943
CONTRACTS COMPLETED: APRIL 1944

Remarks: These contracts marked first use of production-line technique in airship construction. Only company with veteran staff of airship-construction engineers, Goodyear was able to use thirty years' aeronautical experience to develop structural innovations making for greater speed, strength, range in these guardians of the sea lanes. No escorted vessel has been lost to submarines while conveyed by "K"-type airships.

Contractor holds contracts for 18 different Army-Navy types aircraft, including complete Combat Fighters and bombers.

HOW GOODYEAR AIRCRAFT CORPORATION SERVES THE

1. by constructing sub-assemblies to manufacturer's specifications.
2. by designing parts for all types of airplanes.
3. by re-engineering parts for quantity production.
4. by building complete airplanes and airships.

AIRCRAFT INDUSTRY

5. by extending the facilities of Goodyear Research to aid the solution of any design or engineering problem.



GOODYEAR AIRCRAFT CORPORATION
Akron, Ohio • Uichbold Park, Arizona

PAN AMERICAN USES EIMAC TUBES



End section of typical P. A. ground station electronic Eimac 6X4 tube, shown vacuum tube mounted in Eimac 6X4 chassis.



Pan America World Airways, which has done so much to advance the war-time goals of the nation, has just announced a plan for a new service to South America. Employing a fleet of seaplane planes, carrying 124 passengers, flying at more than three hundred miles an hour, Pan American proposes to take service from New York to Rio de Janeiro in less than twenty hours instead of the present sixty-five hours, charging \$175 for the trip, against the current cost of \$491.

Pan American Airways and all its associated and affiliated companies, which comprise the P. A. A. World System, have been using Eimac tubes in the key sockets of all ground stations for a number of years.

Because of the extensive operations of Pan American World Airways, these tubes have been subjected to about every test possible—altitude; ground level; extremely cold climates and high temperatures found at the equator; conditions of high and low humidity; and in some instances, when new tubes are being built, perhaps somewhat trying power conditions. The high regard which P. A. A. engineers have for Eimac tubes is clearly evidenced by their continued and more extensive use, as the years roll by.

The fact that Eimac tubes are the number one favorite of the commercial airlines is important evidence to substantiate the oft repeated statement that "Eimac tubes are first choice of leading electronic engineers throughout the world."

Follow the leaders to



BTEL-McCULLOUGH, INC., 947 San Mateo Ave., SAN BRUNO, CALIF.
PLANTS LOCATED AT: SAN BRUNO, CALIFORNIA AND SALT LAKE CITY, UTAH

Expert Agents: **FRAZER & HANSEN, 304 Clay Street, San Francisco, California, U. S. A.**

PERSONNEL

William B. Moore, operations manager for All American Aviation, Inc., has been named vice-president in charge of operations.



Moore joined All American in 1942 and soon became operations manager of the military cargo division. Prior to that he was manager of the Rite Airport at Harrisburg, Pa., and has been active in aviation since 1927.

Robert W. Tuttle has been appointed assistant to Herbert J. Lyall, eastern traffic manager for American Airlines. He has been acting as liaison in Selective Service and manpower relations for American and will now assist in sales and traffic functions in the eastern region.



Col. Ralph C. Parker, former general traffic manager of Delta Air Lines, is now assigned serving with the European division of the Air Transport Command in France as assistant chief of staff in charge of priorities and traffic. Colonel Parker, who was called to active service in the Army, Smith is now a major general in the Air Transport Command. Kemp has been promoted to public utility, insurance and lending corporations as well as aviation.

on the staff of Eric, Karl S. Wang, recently served in the procurement and trade office at Washington headquarters of the Consulate.

H. Arthur Dunn, formerly with the U. S. Government, has formed the firm of H. Arthur Dunn and Associates with Washington offices. The firm will assist in the negotiation for the disposal of surplus war materials for corporations.



A. N. Kemp (photo), president of American Airlines, Inc., has been elected a member of the board of directors of Chase National Bank. Kemp was elected a director of American in 1941, and was added to serve as a member of the board of directors of the Chase National Bank.



Smith was called to active service in the Army. Smith is now a major general in the Air Transport Command. Kemp has been promoted to public utility, insurance and lending corporations as well as aviation.



Robert E. Hagle has joined Scott Aviation Corp. as field engineer to cooperate with aircraft in a new project in co-ordinating Scott's aircraft designs with their requirements. Hagle comes to Scott from Bell Aircraft Corp., where he was chief of planning in their experimental division. He has been in aviation engineering, sales and administration since 1932.



E. M. Mortis, in loan from the R. F. Goodrich Co., in special assistant to the administrator of Surplus War Properties Administration and later with the War Production Board, is in Europe on a new government assignment. Goodrich also announces appointment of W. A. Smith as manager of surplus war materials at the Industrial Products Sales Division. Smith has been technical representative in the Washington office.

Gay H. Hogue was named president of Columbia Aircraft Industries, Inc., Portland, succeeding J. S. J. Hobbs, president since the company's founding four years ago. Hobbs resigned to devote his time to aviation research and designing. Other officers elected by the stockholders include: H. B. Glasser, executive vice-president and secretary; Ralph T. Shattuck, vice-president and chairman of the board; and J. C. Landrum, assistant secretary-treasurer.

Leo Lewis Terminal, Inc., announces election of Herbert J. Lyall, eastern traffic manager of American Airlines, as president and B. A. O'Connor, western division manager of Eastern Air Lines, as vice-president.

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Col. William Westlake, assistant to the director of public relations, Army Air Force, has returned from a special public relations mission to England, France and Italy for Gen. H. H. Arnold. Colonel Westlake visited the British, Ninth and Fifteenth air forces during his mission's trip.

Capt. Arthur E. Smith has been transferred from the San Antonio air service command to Ogden air service command, Hill Field, Utah, as service information officer. Capt. A. B. Wasmuth, formerly at Ogden, has been transferred to the San Antonio air service command.



ILLINOIS U. AERONAUTICS ADVISORY COMMITTEE:

Members of the committee which met recently at the University of Illinois to discuss their post-war aviation training program are standing, left to right: W. J. Blackhawk, general manager, AeroProducts Division of General Motors Corp.; L. R. Jaquod, executive assistant of Transcontinental and Western Air, Inc.; Col. A. D. Tuttle, medical director of United Air Lines; J. R. Schaefer, vice president of Boeing Aircraft Co., and seated, Comdr. A. P. Bonaldi, formerly of United Air Lines; D. M. Woods, professor of mechanical engineering of the University of California and chairman of the operations; Frank Ullrich, director of aviation education service, Civil Aeronautics Administration.

Firestone

PRODUCING FOR WA . PREPARING FOR PEACE



YOU CAN PARK YOUR PLANE "ON A DIME" with this New Steerable Tail-Wheel

FOR MANY YEARS, FIRESTONE TIRES have been the standard of safety for aircraft on the ground. Now, Firestone makes another contribution to greater ground reliability—a new steerable tailwheel strut assembly for light planes. It has a solid tire reinforced to a plastic hub. Sealed-in lubrication requires replacing only at major overhaul periods. Tapered roller bearings carry vertical loads in the strut and in the wheel. Needle roller bearings in both strut and wheel take side thrusts. The steering mechanism has 75% greater cam area so insure maintenance-free performance.

Beyond the controlled steerable range, straight rudder pedal operation permits sensitive free swiveling action without passing the engine applying brakes. Throughout the entire steerable range, steering is positive and independent of torque in the rudder control connectors. The complete assembly is light in weight and low in price and the entire assembly or wheel only can be interchanged with present original equipment units. For prices and additional data write, wire or phone Firestone Aircraft Company, Akron, Ohio, or Los Angeles, California.

The bearings designed into this new assembly are the direct result of test experience with tailwheels made to comply with specifications of the United States Navy for carrier-based fighters. This is but one example of the quality of design and materials built into this newest Firestone aircraft product.



For the best in maintenance, listen to the "Voice of Experience" and select Firestone and Goodyear products and the Firestone "Safety by Design" recommended by the National Air Transport Association.

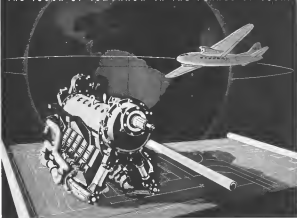
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TIRES, TUBES, WHEELS, BRAKES, AIR SPRING LANDING GEARS, BATTERIES, SPARK PLUGS, HOSE/CLAMPS, VELON
SEAT COVERING, FOAMEX CUSHIONING, FUEL AND OIL CELLS, BUSHINGS AND MANY OTHER AIRCRAFT SUPPLIES

THE TOUCH OF TOMORROW IN THE PLANES OF TODAY



RESEARCH PAYS a 30,000 Mile Bonus

Powerful and durable as a gem, Ranger engines deliver their dynamic punch under the toughest conditions flying assignment in the book.

Normally, engines in service are "guaranteed" for major overhaul about 600 hours. But Rangers have consistently paid a service "bonus" up to 50 per cent. It's common for a Ranger engine to reach the 900-hour check point, putting, overall, delivering full power . . . 30,000 and more extra miles of flight.

Ranger-powered planes cut through the rugged mists of Canada, the darkened host of danger; they fly in Mexico, throughout South America—and in South Africa. They do their light job, steadily, under all sorts of field conditions.

The twelve cylinder Ranger, for example—accounted for weight economy, inverted for a better field of vision, (ideal for better steadiness—less hazard and hours of turn in rigorous wartime operations. Yet Rangers continue to pay a bonus—hundreds and hundreds of extra hours in the air.

In use only an military planes today, Ranger engines on commercial airline and private planes, (conceive) will provide those extra hours of service for efficient and economical operation.

Fairchild research—the constant quest for better methods, better methods, better results—has made this Ranger bonus possible. It springs from Fairchild engineering knowledge and experience that leads the "touch of tomorrow to the planes of today".

BUY U. S. WAR BONDS AND STAMPS

RANGER AIRCRAFT ENGINES

Division of Fairchild Engine and Airplane Corporation • Farmingdale, Long Island



Administrator with the Air Service Command and connections with such aeronautical companies as Curtiss-Wright, Fisher Aircraft Corp., and others.

E. J. Meaton, Jr., formerly director of training, schedules and inspection for Continental Air Lines, has returned to become assistant to **Jack Lee**, member of the Civil Aeronautics Board. Meaton replaced **James W. Binkley** who has opened offices in Washington in an aviation consultant and attorney.

James S. Farrow, formerly assistant to the manager of Douglas Aircraft Co., Inc.'s Chicago plant, has been promoted to aviation manager of the national and international Douglas service operation.



He was appointed to succeed **Don S. Spang**, who has been given a new assignment. Farrow started with Douglas Aircraft Co. in 1928 and served at the El Segundo plant and the Hawthorne Division before his transfer to the Chicago position.

Vigil Peterson has taken over the duties temporarily of **Robert Kinkead**, assistant to **James F. Morris**, vice-president of Boeing Aircraft Co. Kinkead is on leave of absence, due to illness.

Leonard C. Truesdell has been appointed general sales manager of the Home Radio Division of Bendix.



Willard Woodford, information chief of the Washington area War Relocation Commission, has joined the Veterans' Administration, where he will do informational work for **Reg. Gen. Frank T. Hartz**. Woodford has been a columnist on the New York World, New York Times, New Orleans Daily States and other well known newspapers.

Paul H. Eckhardt has become assistant sales manager of the new radio receiver division of Washington Electric and Manufacturing Co.

Vernor D. Vale is now technical director of Embury-Riddle School of Aviation, Miami, to prepare new training programs for veterans and civilians. Vale has an extensive background in the aviation field, including work as a civilian training

Aviation Corp. He has been sales manager of Crouley Corp.'s radio and appliance division.

Ernest W. Thompson, works manager of the Nashville division of Consolidated Vultee Aircraft Corp., has been named acting division manager to assume the duties of **J. W. Bennett**, resigned. **C. W. Thompson**, former engineer in the chief of operations at the Nashville division, has been transferred to the Allentown, Pa., division, where he will serve as assistant to the works manager.

A. J. Schmidt has been named Pacific regional manager for Allyn-Chadman Mfg. Co. He has been in charge of the Seattle office.

TELLING THE WORLD

• **Engineering Research Corp.**, Riverside, Md., designers and manufacturers of the Ercoppe and machine tools now being used and under in the aircraft industry, appointed **Pettigall and Peat**, Inc., New York advertising agency, to do consumer copy on the Ercoppe. Ads will appear in national weeklies and magazines and key newspapers throughout the country.

• **J. L. Stutz** has joined the technical staff of Sperry Products, Inc. and will supervise all technical writing concerning the firm's products.

• **Georges Fennie**, formerly with Delta Appliances Division of General Motors, has been named manager of advertising and sales promotion of the newly created Radio Receiver Division of Westinghouse Electric and Manufacturing Co.

• **Col. Kenneth H. Collins**, vice-president of Arthur Koehler, Inc., before he joined the AAF in 1940, was appointed communications officer in the War Relocation Commission of the Air Force Technical Service Command, with headquarters in New York. He will be in charge of district procurement and termination of facilities.

• **Employees of the Bankers Association Academy**, Tulsa, Calif., have published **Volume 1** of their book, **Bank's File**. This monthly magazine, started in September, will replace class books previously published by all persons (bank, advanced) or specialized schools, which the Army has ordered discontinued. Editor is **Walt Bahr**.

• A new booklet issued jointly by Army and Navy entitled "War Films for War Workers" is devoted to illuminating the methods successfully employed in directing attack battle-film time in thousands of war plants.

• **Air Lines Commission** on U. S. Air Policy has retained **Fred Kibben** and his public relations expertise. It is a new firm and is located at Rockefeller Center, New York. Kibben was formerly with General Motors.

GETS NEW AIR COMMAND:

Maj. Gen. Lauris E. Woods received his second star and at the same time a new assignment for his command, the Fourth Marine Air Wing. The Wing will have control of all shore based Marine, Army and Navy aviation in the Gilbert and Marshall Islands and adjacent waters. Gen. Woods received the Distinguished Service Medal for his activities as commander of Marine aircraft during portions of the Guadalcanal campaign. He was director of Marine aviation until he assumed command of the Fourth Air Wing in August.

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Beech to Use Reconverted Plants For New Type Home Manufacture

Units to be constructed in cooperation with Dynastion Dwell-ing Machines, Inc., and International Association of Machinists, based on aircraft technology and using plane materials, tools and facilities.

Application of principles of aircraft construction to other products has been widely discussed in connection with reconversion and now comes Beech Aircraft Corp. with a program to utilize part of its facilities in the building of homes, based on aircraft technology and using aircraft materials, skills, tools and facilities.

First of these houses is under construction as an experiment at Rockwell Plastic Products, at Wichita, one of Beech's sub-contractors. John P. Gaty, Beech vice-president and general manager, announced that an arrangement has been made with H. Rockwell, president of the "Op-mann house," to construct the units at the Wichita plants. Fuller is now in Wichita with other officials of Dynastion Dwell-ing Machines, Inc., to supervise building of the second unit.

Joint Enterprise—The project will be a joint effort among Beech, Dynastion, and the International Association of Machinists, who have issued a joint statement explaining the tie-up. "Our enterprise, joining together management, labor and science for their mutual profit, is the first project of its kind in the country. It is hoped that hundreds of thousands of dwelling associates will be built for both war and post-war use and the original prototype has been "ground-tested."

This program is receiving close attention of the aircraft industry whose executives realize that their expansion must return to a smaller operation and who have given study and consideration to fields outside of aircraft production for their facilities and personnel.

Dwelling Machine—Fuller calls his house a "dwelling machine" and it has been widely discussed in the building construction trades.

He explains that the "dwelling

machine" now under construction at Beech Aircraft "is not the old box-type house of heavy tonnage built on the site. Nor is it a prefabricated panel house." Rather, it is a new house, made possible by technological strides made during the war, largely in aircraft construction.

The houses are built chiefly of aluminum, steel, rubber and plastic and its makers contend it justifies mass production. It is composed of units capable of assembly-line production in any modern aircraft factory. The backers contend that, assuming equivalent floor area, it can be shipped in less than one-quarter the space now used in shipping materials for an ordinary house, or in less than one-half the space used in shipping a prefabricated house. Its parts, they say, including foundation, can be assembled on the site, with the house ready for occupancy in a matter of hours.

Price—While no definite price has been quoted, the manufac-

turers believe that mass-produc-tion methods will make it reason-able.

Gaty said it was his belief that aircraft manufacturing is unsuit-able for production of prefabricated houses. His company had hopes that Fuller's project may be the answer.

"There is a need for modern living facilities which can be met only by mass production methods," Gaty said. "There are no guarantees anywhere of post-war jobs, but our experience of the housing field is one more way of helping protect the incomes of our em-ployees, stockholders and the people of Wichita."

Phase Prospects—The new project does not preclude the con-tinuation of Beech in the aircraft manufacturing business, since the company has definite plans for new and improved airplanes to be built after the war. It is Gaty's view, however, that post-war airplane sales possibilities will be inade-quate to permit employment of all the people now engaged in aircraft manufacture.

The Wichita situation is some-what different than in some other new manufacturing, since surplus building has been more or less a necessary project, backed by civic organizations and the people of the community generally.

It will be several months before the first of the new dwellings will be completed. Outcome of the project will be closely observed in the industry for a possible trend in activities of aircraft plants which plan to combine aircraft manufac-ture with that of other goods



TEST FORD ROBOT ENGINE:

Jet propellers robot-test engine built by Ford Motor Co. for AAF as shown being tested of mouth of steam tunnel capable of expelling air at 400 mph. to equilibrate engine speeds

Hamilton Standard Parts Unit Enlarged

Beech opened in Hartford to meet demands of armed services.

Spare parts department of Hamilton Standard propeller division of United Aircraft has been en-larged, including the opening of a branch in Hartford to meet the de-mands of the armed services for spares.

There are more than 1300 dif-ferent kinds of Hamilton Standard spare parts, varying from a cot-ter pin about an inch long to a sprin-ger 20 inches long and 22 inches in diameter. In addition to spare parts, about 35 different kinds of spare blades are required to supply Hamilton Standard in-stallations, together with many complete assembled propellers which are sent to supply depots to serve.

Feeling—The company has de-veloped considerable attention to the packaging of spares looking to appearance, preservation, bearing efficiency, inspection, checking fast loading, inventory control and dependable identification.

The crash proof, oil-proof boxes are of sturdy fiber board, exter-nally braced with metal-edge stays. Each part is wrapped in special paper and put in a separate com-partment of the box. Racking ef-ficiency is attained by the use of more than a score of different in-serters, dividers and filler pads in combination with 131 different size boxes. This permits an almost un-limited number of packaging ar-rangements.

The company has adopted a dis-tinctive label with the identi-fication number of Hamilton Standard propeller, name of the part, the part number, quantity, two inspectors' certifications and the engineering change on the part, if any.

Vocational Training 25% for Air Program

More than one-fourth of war production vocational training has been conducted for the aircraft program, a new federal survey re-veals.

Aviation services drew the high-est percentage of trainees from di-rect vocational training, and, while no estimates are available, it is believed that an even higher per-centage would apply in the case of technical training, engineering and management training and training



Hamilton Standard Expands Spares Department: Seven of the 355 different war spare parts bases with various types of inserts, dividers and filler pads used by Hamilton Standard in their packing of spare parts are shown above, each part based to fit its own compartment

within industry, the last named being a program similar to trainee supervision and instructors.

Training for Jobs—Pre-employ-ment training for direct aviation services has been given 646,778 workers, some 24 percent of the total in this category. No break-down is available to determine what proportion of these given mil-lion ship training—319,658—en-tailed the aviation field. The same is true in radio, diesel metal, forging, foundry, welding and other classifications.

Supplementary training was given 1,350,393 in the direct avia-tion classification—54 1/2 percent of the total. In this classification only 418,034 were given machine shop courses, indicating a substan-tial drain into other classifications from this field.

Soundproof Material Tested by Douglas

A specially-constructed "quiet room" at Douglas Aircraft is used to test all types of noise-slow-ing materials in an effort to achieve soundproofing within passenger compartments of Douglas trans-ports.

Aluminum, asbestos, fiberglass and kapok are tested before macro-phones with the object of locating and eliminating any extraneous noise. These sound-dampening materials are scientifically investi-gated in the upholstered quiet room to determine evaluations that most effectively cut out objec-tionable frequencies of engine and propeller hum. Specimens of **Lead Speakers Used**—Speakers are mounted below a battery of

loud speakers and subjected to manufactured noises covering the entire range of faltering or ir-regular sounds. A sensitive micro-phone placed opposite the material relays vibrations, penetrating the noise-resistant material in sound-analyzing equipment that make a graphic or permanent record.

Chinese to Make Locomotives

Provision for licensing its manufacture, assembly and sale of Locomotives O-433-1 and O-433-2 are cylindrical horizontally-opposed air-cooled aircraft engines and spare parts in and throughout the Republic of China is made in agreement just announced.

As a part of the program 30 Chinese materials 40 graduate engineers) are to be given a year's training and production work and specialized occupations at the Locomotive Division of Aviation Corp., Williamsport, Pa.

Agreement—Training of the Chi-nese is covered by an agreement and contract between the Com-mission on Agricultural Affairs of the Republic of China (Chinese Air Force), the AAF Air Technical Service Command and the Locomotive Division. Following the year's training, the group returns to China to supervise the manufac-ture and assembly of Locomotives engines there.

The arrangements are the result of negotiations between Mac Gen. P. T. Shaw, Lieut. Col. S. C. Wang, and Capt. W. T. Shaw of the Chi-nese Air Force and William F. Wan, vice-president of Aviation Corp. and the Locomotive Division.

De-Icers Tested On Mt. Washington

R. F. Goodrich Co. research on airplane ice removal takes on locations which afford almost continuous icing conditions and wind velocities.

The summit of Mt. Washington in New Hampshire has been selected as a testing ground for airplane De-Icers by the R. F. Goodrich Co., whose research physicist, Dr. Dwight L. Loughborough, pointed out that the site afforded almost continuous and steady winds and wind velocities that equal or approximate airplane speeds.

Wing Overhaul Used—An airplane wing, mounted like a weather vane so that it will head into the wind has been erected on a tower 16 feet above the geographical summit of the 6,288 foot mountain. On this wing are installed experimental De-Icer models—overhaul containing tubes that are inflated and deflated in sequence to break off ice, being powered by a compressor located inside the tower.

Purpose of the tests, Dr. Loughborough explained, is to study further the physics involved in airplane ice removal. He said ice-removal research has always been

hindered by the difficulty of reproducing, where they can be conveniently studied, the great variety of icing conditions experienced in flight. Through the Mt. Washington tests he hopes to add to the data accumulated through extensive wind tunnel studies at the Goodrich plant and recorded from actual flights.

Firestone Perfects New Rubber Cement

Development of an adhesive that is increasing service of aircraft and engine whiffles is reported by Firestone Tire and Rubber Co., whose executive vice-president, L. R. Jackson, describes it as the only one that will bond any synthetic rubber to metal.

This means savings of man-hours and elimination of steps in many manufacturing processes where rubber must be bonded to metal. He explained that many metals formerly had to be brominated before they could be bonded to synthetic rubber and that the new cement not only eliminates this step but provides a more uniform adhesion than is possible through the brominating method. Spots of water or rust film, both of which destroy the effectiveness of many cements, are said not

Lie Specialists

The Aeronautical Chamber of Commerce has submitted the names of five technical specialists to serve with Baggage Headquarters, AEF, at the suggestion of the Army, one of whom will be chosen to serve at headquarters.

His duties will include the fitting of parachutes coming out of Germany on aircraft and not in descending here it may be applied to future war planes and its usefulness to the aircraft manufacturing industry.

The men selected will not represent the aircraft industry as such, but will be in a manner on which the industry's trade association has agreed will generally represent industry's viewpoint.

to assist Firestone's new adhesive.

Sinks to Aluminum—Jackson and the adhesive is particularly valuable in its bonding of aluminum, which can not be successfully brazed. Since aluminum and magnesium are key metals in the aircraft industry, the new adhesive should play an important part in that manufacturing field.

P-W (Mo.) Output To 1,000,000 hp in Month

Pratt & Whitney Corp. of Missouri, one of the last of the big plants for war production, turned out more than 1,000,000 hp last month in engines, power sections and spare parts.

This Kansas City plant, designed especially for mass production of the new R-2800-C engines with a designed rating of 1,100 hp, not only builds complete engines but also manufactures power sections for its sister Pratt & Whitney division in East Hartford. It has been only 18 months since the first engine was produced at Kansas City. **Used on Secret Plans**—The engine is used in the Grumman Hellcat, the Vought Corsair and the Republic P-47 Thunderbolt. In addition, the engine also will go into many planes, still on the restricted list.

L. C. Mallet, general manager, pointed out that the plant is being operated for the Navy without profit either for Pratt & Whitney Aircraft Corp. of Missouri or United Aircraft.



Dear Bro. Joe

As a Thunderbolt-maker to a Thunderbolt pilot, I just wanted to tell you how we in the Republic plant feel about you guys. Sometimes we think you're pretty good. We build 'em fast - more than 10,000 a year. We see 'em go out of here loaded for every front. We read about them in the newspapers. This is why we burst out and then with a big hurrah for ourselves.

But...and this is the reason for this letter...when the shooting and the back-peddling are all over, we know a Thunderbolt is only eight tons of heavy machinery until one of you guys takes her up into the blue. Only then is it a fighting plane. And let me tell you this: there's a prayer in just about every bolt and rivet of those 10,000 Thunderbolts - prayers that are sort of dropped in by us folks along the assembly line for one particular guy who's going to fly her and fight in her.

So this is the way we feel about you, Joe. It is a small thing to do beside the big thing you do.

Write soon.

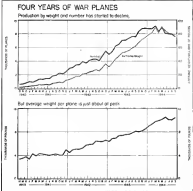
Your devoted brother,

Charlie



REPUBLIC AVIATION

CORPORATION
Specialists in High-speed, High-altitude Aircraft



Uncertain Rate of Return Curbs Enthusiasm for Airline Stocks

No established policy yet defined by CAB in proceedings; limited precedent hampers Board in reaching definite figure, although 10 percent is generally regarded as fair and equitable.

Currently looming in the background is the rate of return that the airlines will be permitted to earn on their investment. It is the fear that the regulatory powers may limit earnings to a static figure that has always qualified investor enthusiasm in the industry.

The Civil Aeronautics Board in its rate proceedings has always looked on an earnings and their relationship to a return on investment. But nowhere has the board defined an established policy. This has not been simple to do as the CAB has been confronted with pioneering in a virtually new field. The air transport industry is a public utility unlike any other and the application of precedent is very limited.

10 Percent—In its past mail rate decisions the Board has shown a tendency in viewing earnings of about 10 percent on invested capital as fair and equitable and has attempted to set rates with this criterion. At present earnings have been running at substantially higher levels. With air mail rates presently derisive there is little occasion to give immediate attention to this factor. Yet, because of higher earnings the carriers were forced to reduce their passenger and freight tariffs last year by action of the board. There is nothing to prevent a repetition of this action.

The airlines are constantly aware of the vital importance of this fundamental regulatory problem. As a result, the Air Transport Association was directed to undertake research in this field. A report has been issued by one of its research assistants and is being examined (Aviation News—Nov. 6, 1944). In a highly academic manner the problem has been examined with no conclusive results other than the advertisement of four recommendations. It has been suggested that further study be made to determine the status of

workout capital investment in the rate base, and cost analysis factors.

All these elements are interesting but highly conventional and more suited to a consideration of the old-line utilities such as railroads and power companies.

Capital Turnover—The airlines turn over their capital at a far greater rate than any other utility. In other words, they generate more revenue a given capital than for example a railroad. This is because the airlines have less of a permanent investment. Railroads have their ruble of way, roadbeds, tracks, terminals and other enormous fixed properties. The carriers do not have any such encumbrances—the largest investment being in the surplus itself.

The larger turnover of capital is directly related to profit margins and their ultimate effect on the rate of return realized on invested capital. For instance, if a department store with a profit margin of percent turns its capital over four times a year at its annual sales of \$200,000, it will have realized a profit of \$8,000 and will have earned 12 percent on its investment. On the other hand, should another store with but the same capital and identical profit margin turn its capital over but twice a year its yearly profit would be only \$3,000 and but 6 percent on invested capital. The same principle is present in comparing the railroads and the airlines.

Stability—The long established utilities have considerable stability of operations. The air carriers are constantly expanding and are very much in the growth category. The same measures in evolving a rate of return on the investment will not work as different factors are at play. Capitalization and financing plans clearly recognize this distinction but regulatory powers have been slow to do so. For ex-

ample, based on a background of sound, conservative earnings, a power company can do considerable bond financing.

Further, the air carriers are not public utilities in having a monopoly on services as do power companies. Competitive routes exist and have been fostered by CAB action. It would appear that some weight should be accorded this fundamental difference. This is also another way of saying that markets for a power company are relatively assured and attached with little risk. The airlines, on the other hand, are faced with many hazards and are in no protected market area.

Federal Aids—The taxation question of federal aids to aviation also enters the picture. At one time, air mail payments were considered a subsidy. This is no longer true. But survey and radio aids, weather facilities and similar federal installations have been a great boon to aviation. The railroads are inclined to demand the air carriers of having an unfair advantage by virtue of these facilities being made available. The steam carriers simply close their eyes to the huge land grants and direct cash appropriations of an earlier era when national policy aimed to forge transportation links throughout the country. Certainly, the needs of commerce, postal service and the national defense have given tremendous impetus to justify whatever aid that has been given aviation—and with far less waste and plunder than that which attended the railroad construction era.

The rate of return question is probably the most complex regulatory problem faced by CAB. The board is situated on one hand in a better position and it appears to permit carriers to operate at highly profitable levels so that the industry can be advanced, motions for greater restraint appear from the post office department and certain members of congress. Should the board cut rates, the accusation is then made that the agency is retarding the progress of aviation and aims to stifle an infant industry. This is the dilemma faced by CAB. The estate problem may appear academic at present but in the post-war period when the air carriers plan to expand and earnings may be spread rather than the rate of return to be realized on invested capital and how it is to be applied will become of utmost importance.

Parts For Sale

Large stock of miscellaneous parts for aircraft and engines—NEW AND USED

WACO UPF-7 PARTS... A large stock at attractive prices.

PARACHUTES... \$50 and up, Pioneer—Switlik—Irving. Seat packs and back packs are both included. Will be sold repacked and ready for use.

ENGINES

- 1 Lycoming O-145-B 1
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- 4 Menasco C 4 S
- 1 Warner 125 H P
- 5 Continental W 670-8A
- 1 Continental A 75-9
- 1 Ranger 6-440-C 3
- 1 Lycoming R 690-B 6

Above parts immediately available at the Athens, Georgia, base of Southeastern Air Service, Inc. Write, wire or phone for prices and further information.

Prompt Service—Satisfaction Guaranteed

OVERHAUL AND REPAIR WORK INVITED

OVERHAUL AND REPAIR BASE AT ATLANTA, GA.
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ASSOCIATE BASE ALL OVER THE SOUTHEASTERN ATLANTA, GA.

SOUTHEASTERN AIR SERVICE, INC.



Operators' Parley May Be Called To Settle World Airline Problems

Meeting to discuss rates, frequencies, etc., is expected to develop from International Civil Aviation Conference at Chicago.

By MERLEIN MICKEL

Seriousness in favor of international airline operators' conferences to discuss such knotty problems as rates and perhaps frequencies, in close coordination with whatever world air authority may be set up by nations representing the world, was voiced at the International Civil Aviation Conference at Chicago, was growing last week as the meeting reached its crucial stages.

Whether the international body would extend beyond the consolidative role envisioned by the United States to that of definite arbiters over routes, frequencies and rates advocated by Britain and Canada was being debated in close-knit conferences between the heads of

delegations from these three nations, with fair prospects for settlement of the issues before the week is out.

► **Operators' Conferences Favored**—A high conference source stated that, whatever the outcome of these discussions, and whatever sort of interim council and permanent international air authority is established, there is a definite tendency favoring operators' conferences as which matters within the scope of activity of an international body could be considered.

This was given impetus by reports that some congressional members of the United States delegation had emphasized that any interim agreement that went be-

yond the admittedly broad limits of the Civil Aeronautics Act 1938 would be tantamount to a unilateral determination of routes, rates and frequencies put into the realm of treaty and must have a two-thirds Senate vote for approval.

► **Committees Mind Up Work**—Technical subcommittees, meanwhile, undertaken by major political considerations, were concentrating their work on recommendations for international aviation practices—practices virtually certain of conference adoption as basis for universal laws. Designed for flexibility in anticipation of whatever amendment might be required as international aviation develops, these apparently were being intended to lay the basis of the U. S. aviation industry, outlined in AVIATION NEWS some weeks ago, that the international technical code might receive the hearty approval of all nations, and be of use in an orderly rapid form.

The plan is that the technical work now nearing completion in Chicago might be used by the United States in participating nations, in corrected editions of draft documents, as soon as the conference is over. This will enable the various nations—in a procedure usually to be followed by the United States—to circulate the recommended practices to the industry so that comment may be obtained by the proposed May 1 deadline.

Thereafter, steps will depend on the nature of the international aviation organization, now under discussion, functioning between the close of the conference and resolution by the various governments of the multilateral draft convention that is its prime objective.

► **Technical Meetings Likely**—Technical experts may have a series of general meetings on the more technical subjects, perhaps, for example, an international conference on airworthiness next summer. An alternative, information on certain subcommittees could do a job of restudy and revision, if necessary, looking toward convening of a final technical convention for inclusion or attachment to the overall multilateral treaty.

It is safe to say that the codes are intended to recommend an absolutely binding force only where necessary, such as in rules of the air. In airworthiness, a determination of standards is being made and here apparently there would be nothing to hamper American prac-

tice. Attempts are being made to avoid repetition of experience of the past in which airworthiness requirements of various nations have been completely unrelated.

Significantly, the proposed codes, which of course are subject to conference approval, are all minimums, and contain nothing to prevent any nation from setting higher standards than those therein outlined. Briefly, they create a floor below which international technical standards might not go. That it is not surprising that American technical experts, particularly, hope that with these characteristics the recommended practices may remove world apoplexy.

Air Cargo Prepares Coordination Plan

Program distributed to stockholders as alternative should prevent Air Express agreement be canceled.

A skeleton plan for proposed coordination of air and surface carriers on an industry basis has been prepared by Air Cargo, Inc., and distributed to all stockholders as an alternative plan of operation should the proposed Air Express agreement between the airlines and the Railway Express Agency be canceled.

The report contains detailed blueprints for maintaining the functions of air express and freight, both on the ground and in the air, by a combination of airlines and surface carriers without "displacement" which has been advocated by railroad interests.

► **Rate Program**—Procedures are outlined whereby necessary information 60 just rates and tariffs might be collected in the shortest possible time so that air and ground carriers could establish point or proportional rates should the present agreement be seriously modified.

The plan presented to Air Cargo, Inc., envisages freight and express rates established on the block-quick basis which has been successfully used for many years in surface transportation. By this method the carrying rate is a single block bounded by degrees of latitude and longitude. Rates are calculated between blocks rather than between individual points. Air Cargo's report suggests adopting this same method for air freight and express. It would be particularly useful in determining rates for

shipment to points not served by air carriers. In such instances point rate fixing would be considerably simplified by the block system.

► **Procedure**—The overall plan suggests a standardized procedure whereby, by each airline establishes its own program of coordination with surface carriers through the area it serves. Thus, of course, is the same plan American Airlines has followed in setting up ground facilities for its air freight program.

Considerable ground work on such a coordinated plan already has been completed. Conference between American Airlines and American Trucking Association have laid the foundation for future cooperation.

As the author of the suggested plan stated, if established as a charter whereby the airlines, should they adopt it, would be able to take rapid and adequate action to preserve the air cargo system under any of a number of contingencies which might develop.

Branniff Awarded Okla. City-Memphis

With members Harlan Branch and Oswald Ryan during, CAB last week extended Branniff's route 18 from Oklahoma City to Memphis via Tulsa, Muskogee, Fort Smith and Little Rock, and at the same time extended American Airlines' AM 22 from Kansas City via Oklahoma City to Tulsa. While Branch and Ryan asserted American could provide local service between Memphis and Oklahoma City along its transcontinental route, the majority held that development of traffic between these points should "be entrusted to a carrier whose operations are of a more local nature." Branniff was awarded the route, with its center at Oklahoma City to a much greater degree than the only other regional carrier in the case, Continental.

► **America**—In addition to the AM 22 extension, American was granted an extension of AM 4 from El Paso to Tulsa via Oklahoma City, bringing American's total new mileage to 1,973. The two extensions to the country's existing "hinge segment of American's" coast-to-coast run and for the first time give Tulsa and Oklahoma City through air service to the East.

In the same decision, involving an extension in an air route from El Paso to Atlanta, Ga., American was ordered to add Joplin, Mo., as a

stop on AM 36, and Eastern Air Lines was authorized to operate direct between Memphis and Atlanta via Birmingham provided no shuttle service was undertaken between Birmingham and Atlanta.

► **Chicago and Southern**—As part of the overall pattern to provide better service in the area between Tulsa and Memphis, Chicago and Southern Air Lines was granted permission to stop at Little Rock, on AM 83 between Pine Bluff and Memphis. This also signed in the minority opinion which pointed out that extending Branniff's route and three carriers on the run between Little Rock and Memphis

Replaces Bailey

Civil Aeronautics Board has appointed a former Army Air Corps pilot, Capt. John Sherman, of Cleveland, as liaison consultant replacing Howard H. Bailey, recently



Capt. John Sherman

named U. S. Civil Air Attaché at Point. Capt. Sherman's aviation experience includes flying over the "Hump" between India and China and service as co-pilot on Pan American Airways' Latin American division. He is a graduate of Yale University and Yale Law School, and recently was honorably discharged from the AAP.

► **Replaces Bailey**—Bailey, who is now serving as a committee secretary at the International Aviation Conference at Chicago.

Branch Renominated

Civil Aeronautics Board Member Harlan Branch of Georgia was renominated by President Roosevelt last week to succeed himself as CAB member for a six-year term beginning Jan. 1. Branch's status has been referred to the Senate Commerce Committee.



NEWEST CAB TRIAL EXAMINERS

Latest additions to the Civil Aeronautics Board's staff of examiners are shown above, posed around Chief Examiner C. Edward Leasure (seated, center). L. to R. are Ferdinand D. Moran, formerly with the Department of the Interior and R. F. C. Jones, Jr., formerly with the Treasury Department and the General Accounting Office, Curtis C. Hendricks, an experienced trial examiner of the Bureau of Motor Vehicle, and Charles J. Frederick, a former hearing officer of the War Labor Board.

Coast Hearings Give Little Hope For Self-Sufficiency of Feeders

Lines could operate in black only through substantial postal subsidies, despite sizeable airmail and cargo potential in new routes, officials believe.

Whatever hopes existed for early self-sufficiency in feeder air line operations vanished last week as the closing of the Civil Aeronautics Board's West Coast feeder hearings in San Francisco.

At the end of previous testimony apparently had established that:

- No airline exists that will produce a profit from the passenger and express potentials estimated for any of the four new feeder routes proposed by applicants.
- No feeder applicant will be able

to break even on the going trunk line air mail pay of 3 mill per pound mile.

The one or more carriers which may be certificated by CAB will require a comparatively high airmail subsidy to show a "reasonable profit."

However, the case for the feeder airline program, nationally, may be said to have been strengthened by shawage that soundly developed routes should generate new air mail to a degree that the sub-

sidy pay required will not necessarily post office deficits covering these particular operations.

Also, there was ample evidence that the Western states possess passenger traffic potentials sufficient to warrant the granting of at least temporary certificates to test public reaction to the air transport industry's newest venture.

Variations in estimates of passenger and cargo potentials were by applicants, and led to the assumption that assessing the possible success of the feeder business was a risky business.

• **Estimates Very Widely**—In their estimates of potential business, feeder line sponsors had declared the need for mail pay subvention ranging from 771 cents per revenue mile to break even to as high as \$1.08 cents.

Generally attacking the proposals of the feeder companies, the major air carriers, United, American Airlines, Western Air Lines and Transcontinental & Western Air, voiced fear that certification of feeder routes may lead directly to the establishment of new and unworkable competition for terminal-to-terminal trunkline business.

Cable examination of witnesses developed the major carrier view that a feeder company certificated for numerous short haul stops might by degree cause elimination of profitable stops and eventually become, in effect, a "through" carrier.

• **UAL President's View**—W. A. Patterson, United's president, stressed what he felt when he said, "The day may come after five or ten years of operation, when feeder applicants will not be so enthusiastic I can visualize hearings in which feeder lines will require financial loans and the only solution will be the creation of new trunk lines and competition that I do not think the territory can stand."

Patterson insisted he was not a participant in the hearings to condemn feeder lines, and added, "I do think them to be economically unsound. But, if public service outweighs economics, United Air Lines will cooperate. We're not here to choke anyone."

• **WAL Opposition**—Feeder opposition from a different viewpoint, however, came from Lee Dwerlitz, president of Western Air Lines.

"I feel that the CAB should postpone the certification of new carriers until established carriers

are on a self-sustaining basis," he said.

Testifying for Western's own application for one feeder route and eight new West Coast "through" routes, Thomas Wolfe, vice-president in charge of traffic, said that "carriers who have pioneered air transportation should have their routes corrected until their business becomes stable."

Feeder line attorneys countered with evidence that the major air lines already are well established and showing profits. And that the time is ripe for such competition, short haul ventures that will give air service to hundreds of communities untouched by trunkline operations.

2 Mexican Airlines Granted U. S. Entry

CAB authorizes operations on American ports at Brownsville and Eagle Pass, Tex., and Nogales, Ariz.

Civil Aeronautics Board, with Presidential approval, has granted temporary permits to two Mexican air carriers, Aero-Texas, and Aero-Transportes, S. A. (LAMSA), authorizing operations into U. S. airports at Brownsville and Eagle Pass, Texas, and Nogales, Ariz. In both cases, the permits are issued for 90 days and are renewable at the Board's discretion for an aggregate period of 180 days.

Aero-Transportes, one of the newest Mexican carriers, asked permission to use the two Texas fields because the airports within their operation exist across the border are inadequate for the Boeing 747-D equipment the line recently acquired.

• **Improvements**—Airport improvements at Matamoros and Piedras Negras, Mexico, to which Aero-Transportes has Mexican government operating permits, are now under way, and the U. S. export authorizations represent temporary arrangements until the Mexican fields are completed. The line has filed application with CAB for a permanent certificate to operate into San Antonio, Tex.

LAMSA, Uniform Air Lines Mexican subsidiary, likewise facing an inadequate airport situation at Nogales, Sonora, Mexico, received permission to use the airport at Nogales, Ariz., which adjoins the Mexican city. Like Aero-Transportes, LAMSA has applied for a permanent Los Angeles route.



Frederick Wilson, Jr., president of Southwest Airlines, on the witness stand in CAB's West Coast hearing and he believed there would not be room for two feeder operators in the territory. Air company president to the single route, he declared, could operate on a given area more economically than several.

Multiple Taxation Relief Forecast

A strong indication that airlines soon may be relieved of the threat of multiple taxation on flying and other equipment was given by CAB member Gerald Ryan last week in the Aviation Clinic in Oklahoma City.

Reviewing the history of Northwest Airlines vs. State of Minnesota case and the subsequent Congressional order to CAB to study and make recommendations before Dec. 30 on airline taxation, Mr. Ryan cited the Board's duty to develop air transportation. "It would be inconsistent," he said, "if the federal government remained inaction in development in any field, taxation or otherwise, which might impair the achievement of this important national policy."

• **Recommendations**—As further reassurance, Mr. Ryan reported that in conversations with a number of state tax officials he heard "full recognition of the importance of avoiding any burdensome multiple taxation." He declared that CAB has appointed an advisory board of persons having expert knowledge of taxation of air carriers, and that the airline industry has offered spirited cooperation.

CAB Awards WAL Denver-L.A. Route

Move confirms Board's policy of strengthening regional carriers, CAB, FWA and CAL applications denied.

By DANIEL S. WENTZ II

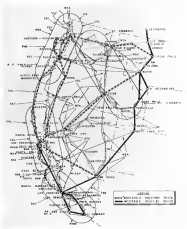
Civil Aeronautics Board last week awarded to Western Air Lines the coveted 311-mile route between Denver and Los Angeles in a decision which strongly confirmed the Board's established policy of strengthening regional carriers. The Board denied applications of United, Eastern, FWA, and Continental Air Lines for the route, pointing out that the desirability of maintaining Western as a strong regional carrier outweighed the benefits of a company service which would accrue from granting the link to a transcontinental carrier.

Operating costs and revenues as estimated by applicants all tended toward the benefit of Western, with eight daily round trips using DC-8's, estimates and operating profit for the first year of \$974,376. With four daily round trips flying DC-4's, this profit would be slightly increased, the carrier believes.

• **Western's Case**—Theory of the case, as outlined by Western, involves the substitution of Denver for Salt Lake City as intermediate point on the transcontinental connecting service operated jointly by Western and United. Should United or any carrier other than Western be awarded the route, the Board stated, the main function of Western's AM 13 (Los Angeles-Salt Lake City) as a segment of a transcontinental route would be eliminated. AM 13 "has always been the backbone of Western's system," the Board declared, and awarding a competitive link to another carrier would seriously impair Western's ability to continue as a strong independent air carrier in a position to compete for traffic in the western section of the country.

Although not mentioned in the Board's decision, the new route serves as a strong basis to criticize the Western-Inland combination by providing an additional link between the two systems.

• **Four-Engine Equipment**—CAB Vice Chairman Edward Wenzel, in a concurring opinion, held that in addition to the reasons set forth by the majority in support of the



PROBLEM FOR CAB:

If feeder airlines are to be certificated on the West Coast, it will be the Civil Aeronautics Board's task to redress the above map in an orderly fashion. The map indicates overlapping of existing and requested routes, and was prepared by Western Air Lines' research staff. It tends to indicate areas of influence with identification of respective applicants in each. From applications now on file with CAB, it appears the Board will have a similar unenviable job in each of its regional feeder hearings.

decision, the new route also would improve Western's ability to utilize four-engine equipment. Western's Los Angeles-San Francisco route, he said, is as competitive that large high-speed aircraft will be a requirement. Until the Denver-Los Angeles award, Western had no other route segments which could support such equipment. De Warner feels, therefore, that the carrier can operate both routes with multi-engine planes and the same type of operation to more advantage than hitherto was possible.

The Denver-Los Angeles route includes Las Vegas, Nevada and Grand Junction, Colo., as intermediate points and will be known as AM 55. Service will not begin until requirements of the national defense no longer necessitate delay.

Contract to Export

The Air Transport Command confirmed last week that American Export Airlines would receive a contract to operate multi-engine

ATC landplanes in trans-Atlantic service. Actual contract has not been signed, but Export's flight crews already are undergoing transitional training.

The European terminals were not disclosed, but it is believed operations will be conducted over routes now flown by ATC to the British Isles or North Africa. The new contract will replace Export's former contract operation for the Naval Air Transport Service, due to expire Dec. 31.

Urge Inter-American Transportation Office

Hemisphere Defense Board makes proposal to 20 Latin American republics; standard equipment on airlines recommended.

Anticipating any world-wide aviation authority that may come out of the Chicago conference, the Inter-American Defense Board has recommended to the 20 Latin American republics the formation of an Inter-American Office of Transportation which "should act, of course, in consultation with the establishment of a general international organization in this field."

Also recommended by the Board's Committee on Inter-American Transportation was the suggestion that all airlines in the hemisphere use aircraft "which will always be available in the hemisphere." Observers interpreted this to mean aircraft manufactured in the U. S., as it followed a discussion of the difficulties which devastated Latin American lines using foreign equipment when war cut off replacements and parts.

Military Measure—The study of Inter-American transportation was undertaken strictly as a military measure and the consequent report is based on possible future military necessity. It proposes an integrated transportation system—land, water and air—to link the Americas Hemispheres so that no country would be dependent upon a single form of transport. While urging that air transportation be greatly expanded with many new, larger and better equipped airports, it declares these should be laid out in a strategic pattern. "Each landing field should be considered, not as an independent unit," it says, "but as part of an airway which probably would be intercontinental in character." Commercial operations would be facilitated by each country's granting



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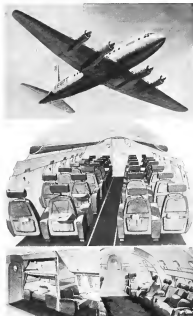
Reconstruction Finance Corporation

On November 1, 1944, the Civil Aeronautics Administration withdrew from the war surplus aircraft disposal program and the services heretofore performed by that agency have been taken over by the Defense Plant Corporation, a subsidiary of the Reconstruction Finance Corporation.

The change in procedure does not involve any change in sales policy. Surplus planes owned by the armed services will continue to be sold at OPA ceiling prices or on sealed bids. For complete information as to location, description of aircraft and conditions of sale please communicate immediately with . . .

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Wanted: Sensible Enforcement

ONCE AGAIN, THE NATIONAL AVIATION CLUB's legal speakers report that existing civil air regulations are the greatest obstacle to expanded personal flying. The same complaint appears wherever personal flyers gather.

Fortunately, the Civil Aeronautics Board safety unit is already well steeped in simplification of the rule book. Its attitude is progressive and intelligent. It realizes that we must stop trying to prevent the flyer from having accidents by demanding either that he be Superman or that he should do practically no flying whatever. It is an enforcement procedure that the fullest critical, constructive public examination should be made new, without awaiting an entirely new book of rules. For the simplest of regulations can be interpreted by indecisive, shortsighted enforcement officials so as to stymie as much flying as possible. And even many of today's unenlightened regulations can be made more sensible, pending their simplification, by thinking, sensible inspectors in the field.

Whether the states should take over enforcement is a moot point even among state aviation officials. The evidence presented by the able speakers at Oklahoma City last week was so meager. The problem is complex and is worthy of the most painstaking scrutiny and analysis.

But the lightplane industry, John E. Morison told the convention, "feels that the policing of personal aircraft and the personal pilot has grown to a point where it constitutes an onerous burden hampering the public right to fly, and imposing additional and unnecessary costs on the flying public."

The General Inspection Division of CAA Safety Regulation has as aptly a history as any Federal aviation agency. Assigned the thankless task, which many state officials do not want, of enforcing government regulations, it has in recent years justified nothing criticism from private flyers and operators. While there are two sides to every controversy, there is an astonishing unanimity of opinion throughout the country which holds the CAA responsible for needless, dubious treatment of the flying public. Even some CAA officials admit this presently.

Conditions have improved since the internecine warfare ended between General Inspection and CIPF-WIS, with the latter's dissolution. Operators report that conditions in some regions have never been better than now. But this change is credited to several wide awake regional executives and does not stem from Washington, which long ago should have been ordering a new deal for operators and flyers. The old debased attitude of discouraging rather than encouraging flying is still reflected in general inspection. Too many field men are more interested in being bug-shot policemen swinging clubs than in putting more pilots and planes in the air. Reports still come in that inspectors are arrogant, partial, petty, prejudiced, incompetent. There are inspectors who set

their own loose schedules without consideration for those they should be helping, and who penalize the outspoken critic by arbitrarily flaking a student, demanding another check flight days or weeks later, or compelling a pilot to wait weeks for re-inspection after a dinky job is done on it.

In some cases special regional gripe sessions have been held by CAA field men with operators, with mutual benefit. These sessions are fortunate. But otherwise conditions are described as deplorable. There the operators and flyers alike get their teeth, prefer silence to penalties, and try to tolerate the Federal boss men. Scores of operators refuse to talk freely to anyone they know is connected with CAA. To newcomers in private flying this condition is insidious. The oldtimers have put up with it so long they are convinced nothing can be done about it.

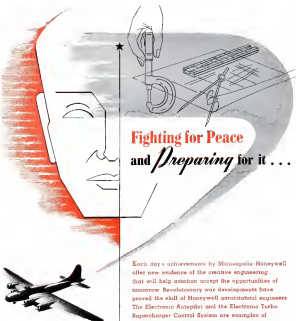
The contention of some like Fred Lantier, head of Safety Regulation, is that replacements and additions are difficult or impossible. But the public would forgive inconveniences and errors by disgruntled inspectors who are overworked. They cannot forgive the hard-boiled, big-stick attitude of intolerance which sits down from medium brackets of CAA authority, which allows intolerance, persecution and pettiness in men who are eager to keep down every vestige of resistance and enjoy evading the score with indignant citizens.

General Inspection's attitude of damning the public and of splitting hairs to carry out enforcement has done more to bring what appears likely to be a sweeping change in CAA, than its honest errors made by inspectors. Its record may well make inevitable a CAA revolution or eventual state enforcement of airworthiness and pilot competency.

Fred Lantier and the newly appointed chief of General Inspection, Maj. William S. Moore, have before them an excellent opportunity to militate a new, revitalized spirit of cooperation and public helpfulness through the field staffs in the next few weeks which, even under present manpower and budget shortages and bad regulations, would go far to encourage personal flying and new regulations are ready. If such a revolution is not forthcoming there appears no remaining reason why William A. M. Barden, Assistant Secretary of Commerce for Air, and the new, farseeing Administrator of Civil Aeronautics, T. P. Wright, should not take action as soon as the current International Aviation Conference permits them to return to domestic problems.

Whether enforcement can better be carried out by the states, as proposed by the Chamber's Personal Aircraft Council and such state officials as the new head of NASAO, Sheldon Sloan, Aviation News is not yet ready to say. But a simple change in the attitude of General Inspection division even vigilant, open to sympathetic friend of the public would do more good at this time than disrupting, sweeping changes brought about before sufficient thought. What is so difficult about courtesy, efficiency and consideration?

ROBERT H. WOOD



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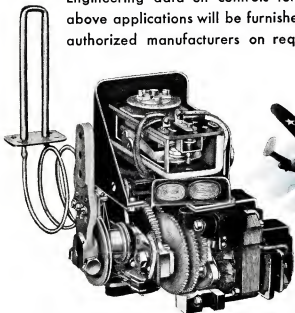
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